# CATALOGUE

OF THE

# University of Arkansas

THIRTIETH EDITION



FOUNDED MARCH 27, 1871

FAYETTEVILLE, ARKANSAS

1902-1903

19	03	1904
JANUARY	JULY	JANUARY
SMTWTFS	SMTWTFS	SMTWTFS
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# CALENDAR, 1903-1904.

#### FAYETTEVILLE.

#### 1903.

Sept. 16, Wednesday-First term begins.

Sept. 16-19-Entrance examinations.

Nov. 26, Thursday-Thanksgiving, a holiday.

#### 1904.

Jan. 22, Friday-First term examinations begin.

Jan. 30, Saturday-First term ends.

Feb. 1, Monday-Second term begins.

June 2, Thursday—Second term examinations begin.

June 12, Sunday-Baccalaureate sermon.

June 16, Thursday-Annual commencement.

## MEDICAL DEPARTMENT, LITTLE ROCK.

#### 1903

Oct. 19, Monday-Regular session begins.

#### 1904.

April 9, Saturday-Session ends.

#### LAW DEPARTMENT, LITTLE ROCK.

#### 1903.

Sept. 21, Monday—Fall term begins.

#### 1904.

Jan. 23, Saturday—Fall term ends.

Jan. 25, Monday-Spring term begins.

June 3. Friday-Spring term ends.

## BRANCH NORMAL COLLEGE, PINE BLUFF.

#### 1903.

Sept. 7, Monday—Session begins.

#### 1904.

June 9, Thursday—Session ends.

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\*Term expires May 20, 1903.

<sup>\*\*</sup>Term begins May 20, 1903.

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\*With the exception of the President the names are arranged in groups according to seniority of appointment to present rank.

\*\*Resigned January 1, 1903.

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Assistant Superintendent of Mechanic Arts.

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Instructor in Elocution and Physical Culture.

MRS. NEIL CAROTHERS, Librarian.

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C. WATKINS, M. D., Professor of the Practice of Medicine.

JAMES H. LENOW, M. D., Professor of Diseases of Genito-Urinary Organs.

LOUIS R. STARK, M. D., Professor of Gynecology.

E. R. DIBRELL, M. D., Professor of Physiology, Physical Diagnosis, and Clinical Medicine.

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F. L. FRENCH, M. D.,

Professor of Materia Medica, Therapeutics, Hygiene, and Botany, and Secretary of Faculty.

CARLE E. BENTLEY, M. D.,

Professor of Clinical Surgery and Dermatology.

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Professor of Surgical Pathology and Bacteriology.

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Demonstrator of Anatomy.

E. E. MOSS, A. M., LL. B., Professor of Legal Medicine.

WILLIAM A. SNODGRASS, M. D., Prosector of Anatomy.

Four Assistant Demonstrators of Anatomy to be supplied. Subordinates to the other chairs to be supplied.

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# LAW DEPARTMENT.

## At Little Rock.

#### OFFICERS.

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J. H. CARMICHAEL, LL. B., Dean.
THOMAS N. ROBERTSON, LL. B., Secretary.

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- JOHN FLETCHER, LL. M., Real Property.
- WILBUR F. HILL, LL. B., Equity Jurisprudence.
- GEORGE W. MURPHY, LL. B., Law of Evidence.
- TOM M. MEHAFFY, LL. B., Criminal Law, Practice, and Procedure.
- E. W. WINFIELD, LL. B., Judgments.
- J. F. LOUGHBOROUGH, LL. B., Commercial Paper, Domestic Relations.
- LEWIS RHOTON, LL. B., Law of Torts.
- DEADERICK H. CANTRELL, LL. B., Corporations.
- T. N. ROBERTSON, LL. B., Agency, Insurance.
- T. E. HELM, LL. B., Partnership.

#### LECTURERS.

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JUDGE JACOB TRIEBER, LL. B.

MORRIS M. COHN, LL. B.

GEORGE B. ROSE, LL. B.

JAMES H. HARROD, LL. B.

# BRANCH NORMAL COLLEGE.

## At Pine Bluff.

#### FACULTY.

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Mental and Moral Sciences, Literature.

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JOHN H. MICHAEL,

English Grammar, Rhetoric and Physical Sciences.

ANNA C. FREEMAN, L. I.,

Arithmetic, Geography and Drawing.

IRENA V. COLEMAN, L. I., History and Arithmetic.

MATTIE I. BENSON,

Dressmaking, Typewriting and Music.

#### DEPARTMENT OF MECHANIC ARTS.

B. N. WILSON, B. Sc., M. E., Superintendent of Mechanic Arts.

W. S. HARRIS,

Assistant Superintendent of Mechanic Arts.

J. L. ROSS.

Instructor in Machine and Forge Shops.

\*Part of Term.

# AGRICULTURAL EXPERIMENT STATION.

## At Fayetteville.

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ROBERT R. DINWIDDIE, M. D., Pathologist and Bacteriologist.

CLIFFORD LEWIS NEWMAN, M. S., Agriculturist.

ERNEST WALKER, B. S. Agr., Horticulturist and Entomologist.

JOHN FRANKLIN MOORE, B. S., Chemist.

GEORGE B. IRBY, B. A.,

Assistant Agriculturist at Newport.

## COMMITTEES OF THE FACULTY.

The President of the University is ex-officio a member of all standing committees.

- 1. On Discipline-Professors Rose, Gladson, Pickel.
- 2. On Doubtful Cases-Professors Knoch, Reynolds, Muckenfuss.
- On Classification and Petitions Professors Purdue and Shannon.
- 4. On Accredited Schools-Professors Reynolds and Dunn.
- 5. On Library-Professors Carr, Millis, Purdue, Mrs. Carothers.
- 6. On Athletics-Professors Futrall and Newman.
- On Reception of Students—Professors Kuykendall, Cole, and Johnson.
- 8. On Catalogue-Professors Carr, Futrall, Knoch.

# THE UNIVERSITY OF ARKANSAS.

The University is at the head of the public educational system of the state of Arkansas. It seeks to foster the higher educational interests of the state, broadly and generously interpreted, and to make provision for the demands of advanced scholarship in as many lines as its means will permit. It is the aim of its faculty and board of trustees, from year to year, to bring it into still closer articulation with the public schools of the state, and in connection with them to afford to all the youth of either sex ample facilities for liberal education in literature, science and the industrial arts, and for the professional studies.

Through the aid received from the United States and from the state of Arkansas, the University is enabled to offer to its students free tuition, except in the studies of law, medicine, music and art, and to open wide her doors to all seekers of learning.

The institution was established by virtue of an act of congress, approved July 2, 1862, providing that public lands should be granted to the several states, to the amount of "30,000 acres for each senator and representative in congress," from the sale of which there should be established a perpetual fund, "the interest of which shall be inviolably appropriated by each state, which may take and claim the benefit of this act, to the endowment, support and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in

such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." The act forbids the use of any portion of the aforesaid fund, or of the interest thereon, for the purchase, erection, or maintenance of any building or buildings. The states accepting the provisions of the act are required to provide for the construction and maintenance of the necessary buildings, and for the expenses of administration in carrying out the purposes of the act.

The general assembly of the state of Arkansas accepted the national law by passing an act, approved March 27, 1871, which provided for the location, organization, and maintenance of the University of Arkansas, and which allowed the several counties of the state to compete until a certain time for the location of the University by making public or private donations of bonds, moneys, or lands. Several individuals and communities made bids; Washington, the only county that competed, voted \$100,000. Fayetteville. Washington County, voted \$30,000 in addition, and was selected as the seat of the University. The institution was opened January 22, 1872.

Under an act of congress, approved March 2, 1887, the University receives \$15,000 annually for the maintenance of the experiment station, "To aid in acquiring and diffusing among the people useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science."

Under an act of congress, approved August 30, 1890, the University receives \$25,000 annually, "to be applied only

to instruction in agriculture, the mechanic arts, the English language and the various branches of mathematical, physical, natural and economic science, with special reference to their application to the industries of life."

The University is dependent not only upon the income donated by the national government, but upon the appropriations made by the general assembly of the state of Arkansas, in order to meet the requirements of the national government, and to provide for the further development of the institution.

#### LOCATION.

The University, except its Medical and Law Schools and Branch Normal College, is located at Fayetteville, Washington County, Ark. Situated in the heart of the Ozark Mountains, it is more than 1,500 feet above the sea level. The location is thought to be unsurpassed in salubrity of climate, in beauty of surrounding scenery, in variety and perfection of agricultural and horticultural productions, and in the unorality and intelligence of its people.

Students may reach Fayetteville from both the north and the south by the Texas branch of the St. Louis & San Francisco Railroad, which has three trains daily each way, and various connections with other roads, both north and south. From the west students may reach Fayetteville by the Ozark & Cherokee Central Railroad.

## BUILDINGS.

## University Hall.

This is a brick structure with cut stone trimmings and a stone foundation. It is four stories in height above the basement. It consists of a front building 214 feet in length,

and two wings, each 124 feet in depth, the whole forming three sides of a quadrangle. This building contains a large number of class rooms, chapel, library and reading room, separate study halls for the boys and girls of the preparatory department, armory, magazine, band room, laboratories for engineering, biology, and geology, music and art rooms, president's and commandant's offices, natural history museum, examination hall, literary society halls, toilet rooms, etc., in all seventy rooms, together with broad corridors and stairways. The building is heated by steam, lighted by electricity, and supplied with water from the city waterworks.

#### Science Hall.

This building, designed especially for the departments of chemistry and physics, is a substantial two-story brick building, 50x90 feet. The basement is fitted up with suitable furnaces for assaying and metallurgical work. On the first floor are the lecture rooms of the two departments, the general physical laboratory, the advanced physical laboratory and storeroom, and also the office of the professors in charge. On the second floor are the chemical laboratories, including a laboratory for general chemistry, a laboratory for qualitative analysis, and a laboratory devoted to quantitative analysis, and a private laboratory; also a storeroom for chemical supplies and a weighing room. The building is supplied with gas, water, steam heat, and with modern appliances for technical work. It will accommodate about 150 students.

#### Buchanan Hall.

This is a substantial and handsome brick building, three stories high, and containing over forty rooms. It is favorably located, with a view to the health of the occupants, and convenience of access to University Hall. The rooms are large, well ventilated and lighted, and open into broad corridors extending lengthwise through the building. From a wide veranda in front, there are three entrances to the building. There are also two rear entrances, and on the third floor a suite of rooms fitted up for an infirmary. Through the generosity of the ladies of Fayetteville, this suite of rooms has been thoroughly equipped. In the rear of the hall a brick building has been erected, which furnishes bath and toilet rooms, supplied with cold and hot water.

## The New Dormitory.

The new dormitory, for which a special appropriation was made by the general assembly of 1901, is now in use. It is located west of the main University building and north of Buchanan Hall, and is convenient of access to both buildings. It is a substantial brick structure, three stories high, with a foundation of range stone work, and with trimmings of dressed limestone, and contains in all some twenty-five rooms. The first story contains a commodious dining hall, 38x86 feet, which is sufficiently large to accommodate all students who occupy rooms in University dormitories. On this story also are kitchen, storeroom, furnace room, coal bin, etc. The second and third stories contain some twenty rooms for students, besides ample corridors, stairways, etc. By the aid of the superintendent and the liberality of the students and citizens a handsome suite of parlors has been tastefully and elegantly furnished. The entire building is heated by steam, lighted by electricity, and supplied with water by the city waterworks.

#### Agricultural Buildings.

The principal buildings of the agricultural experiment station are of brick, one story in height. They contain several offices, the laboratories of the station, the station museum, and several commodious storerooms. Belonging to the department of agriculture are a large barn, stock shed, dairy house, and other necessary outbuildings. There is also a handsome and conveniently located cottage residence for the manager of the University farm.

## Horticultural Building.

This structure is 60x23 feet, is heated by steam, and supplied with improved ventilating apparatus and other modern conveniences. Attached to this is a building 24x30 feet, which is designed to be used as a laboratory for plant study. The equipment thus provided furnishes much-needed facilities for study and research to all persons interested in plant life, and especially to students of horticulture.

The building is located north of University Hall, and together with the improvement of the adjacent grounds, adds much to the sightliness of that part of the campus.

## The Shops.

The present Mechanical Hall was built to take the place temporarily of the building consumed by fire on October 20, 1902. It is of brick, 40 feet wide and 155 feet in length, with the boiler house, 35x40 feet adjoining. The shop contains the mechanical laboratory, machine shop, wood shop, foundry and forge shop. The shops will accommodate about fifty students at one time.

## The Library.

The library occupies the north wing of the main building, second floor. It now contains about 8,000 volumes, with numerous pamphlets, maps, charts, etc. Shelves are provided for 14,000 volumes, with room for expansion. There are also special libraries belonging to various departments comprising nearly 1,800 volumes.

The privileges of the library, under proper regulations, are free to all students.

The Dewey decimal system of classification and the Cutter book-numbers are used, thereby simplifying the circulation of books and the general care of the library.

The leading high class periodicals (including magazines, reviews and various technical monthlies) are regularly taken, and are bound as they accumulate. This vast fund of current literature is rendered more useful and accessible by "Poole's Complete Index" to periodic literature from 1802, to the present time. Forty-five magazines, thirty-five weekly and seven daily papers are received by the library.

Among the works of general reference in the library are many of the best encyclopedias and dictionaries.

The card catalogue, with a capacity for 30,000 volumes, greatly facilitates reference and increases the usefulness and popularity of the library. Cards for Warner's Library of the World's Best Literature, prepared by the American Library Association, have recently been added to this catalogue.

## The Armory.

The armory is a large, well-lighted room, 60x80 feet, occupying the entire basement of the north wing of the main building. It is substantially fitted up with arm racks,

compartments for equipments, and other conveniences. Two adjacent rooms are assigned to the military department, and are used as bandroom and storeroom.

The equipment of the department consists of 300 Spring-field cadet rifles, of the same model as those used at the United States Military Academy at West Point, 300 sets of infantry equipments, twenty-seven cadet swords (West Point pattern), national colors, flags, signal equipment, ammunition, etc., and a superior set of band instruments.

The arms and equipments are furnished the University by the general government. The other equipments have been purchased by the University and belong to the military department. The equipment is sufficient for a battalion of 400 cadets.

#### THE LABORATORIES.

In the laboratories of the University opportunities are afforded for practical instruction in chemistry, mineralogy, physics, botany, zoology, entomology, horticulture, and it civil, mechanical and electrical engineering.

#### Chemical Laboratories.

The laboratories for chemical work are four in number and are situated in Science Hall. The laboratory of general chemistry is furnished with desks capable of accommodating a hundred students. Each desk has a cupboard and drawers, and is provided with gas and water. The qualitative laboratory has desks for sixteen students. Each desk is provided with suitable conveniences for taking care of apparatus, and is supplied with all the common reagents. The room is provided with a hood and other equipments usually

found in qualitative laboratories. The quantitative laboratory has suitable accommodation for sixteen students, with the usual equipments. Adjoining the quantitative laboratory is the weighing room, which contains two of Becker's best analytical balances, besides a number of less accurate instruments suitable for weighing large quantities of chemicals. The storeroom contains all the apparatus and chemicals. The room is in charge of an assistant, who gives out the supplies and keeps the books. This room contains the apparatus for preparing distilled water. Adjoining the balance room is the private laboratory of the professors in charge.

The general physical laboratory is a room 20x70 feet, and is provided with large tables suitable for use in performing experiments in general physics and physical measurements. It has also pillars built up from the ground, and independent of the rest of the building, for the accommodation of delicate instruments which would otherwise be disturbed by the vibrations of the floor. The storeroom of physical apparatus is supplied with instruments suitable for illustrating the principles of physics and for the use of students in practical work.

The advanced physical laboratory has three cement tables, built up from the ground, wall attachments for galvanometers, and other conveniences for work in electricity, light and heat.

# Biological Laboratory.

The biological laboratory is located on the third floor of University Hall, and has accommodation for about forty students. The laboratory is furnished with work tables, a sink, and the necessary gas fixtures for incubators, sterilizers, etc., also an aquarium for keeping aquatic animals and plants on hand for observation and study. The equipment in apparatus consists of Bausch and Lomb compound microscopes, dissecting microscopes, microtomes, and such other apparatus and chemicals as are needed for practical work in biology. There is a collection of insects and also apparatus for collecting, drying, preserving and mounting insects. The laboratory has a number of skeletons of different animals, and models and charts for teaching plant and animal anatomy.

## Geological Laboratory.

The geological laboratory is provided with aneroid barometers, compasses, hand-levels, pedometers, etc., for field work, two petrographic microscopes, and an excellent equipment of drawing apparatus for the construction of geological sections and topographic maps; also, with apparatus for the construction of relief maps.

There is a well-equipped laboratory for determinative mineralogy, and a room for the preparation of relief maps and other work connected with the department of geology.

## Mechanical Engineering Laboratory.

The laboratory contains the following machinery:

One 15-horsepower vertical boiler.

One 10-horsepower slide-valve steam engine.

One 10-horsepower Hamilton gasoline engine.

One 3x4 Duplex steam pump, and one 60,000-pound Rheile testing machine.

The laboratory is well provided with apparatus for experimental work, including steam calorimeters, engine

indicators and counters, injectors, thermometers, pressure gauges, measuring tanks, feed-water heaters, condensers, etc.

The steam boilers used for heating the University buildings are arranged so as to be available for experimental work, and the shop engine, a Corliss, is also used for purposes of instruction.

## Electrical Laboratory.

The electrical laboratory affords excellent facilities for experimental work with practical dynamo-electric machines. In the laboratory will be found the leading types of machines for arc and incandescent lighting, and for power; constant current and constant potential motors and generators; a Kelvin balance, standard cells, and a potentiometer for standardizing measuring instruments; Weston and other voltmeters and ammeters; electro-dynamometers; galvanometers of the tangent, reflecting, and Deprez d'Arsonval types; magnetometers; standard resistance coils and bridges; absorption dynamometers, telegraph and telephone instruments.

During the past three years there have been added two Kelvin voltmeters, a D. C. A. C. polyphase motor-generator, a standard photometer, 120,000 volt testing transformer, wireless telegraph apparatus, electroplating vat, X-ray apparatus, and a large number of smaller pieces of apparatus.

This equipment, to which valuable additions are made from time to time, enables the student to carry on experimental work of a very wide range, and to attain proficiency in operating and testing electrical machinery and instruments.

Students are also allowed to inspect the plant of the Fayetteville Electric Light and Power Company, and to take measurements and make tests on it. The electrical laboratory is connected with their primary mains, and is thus supplied with alternate currents of 2,200 volts potential for experimental work.

## Civil Engineering Laboratory and Equipment.

The civil engineering laboratory is provided with all necessary instruments for work in land, railroad and city surveying. The equipment of field instruments has been selected so as to afford students the opportunity of becoming familiar with the instruments of different manufacturers. Among the usual field instruments there are a number of engineers' transits, theodolite, Y levels, transit with solar attachment, compasses, hand levels, standard and ordinary steel tapes, aneroid barometers, plane table, sextant, etc.

The laboratory has been entirely remodeled, now occupying two large, well-lighted rooms in the basement of the main building. An equipment for work in practical astronomy has also been added, consisting of a large altazimuth, reading to seconds by levels and micrometers; a sidereal clock with break circuit attachment and a chronograph reading to tenths of seconds.

#### Cement Laboratory.

The equipment for the purpose of testing the strength of mortars and cement, includes one 2,000-pound tensile testing machine, standard consistency apparatus, Vicat's and Gilmore's needles for determining set, metal moulds for tension, compression and transverse test-pieces, steaming apparatus for blowing tests, and sieves for fineness.

## Shop Equipment.

The machine shop contains a Corliss engine, which runs the machinery in the whole building, a large iron planer, a shaper, four lathes of different sizes and makes, drill press, two grinding machines, milling machine, 60-000 pound testing machine, and a good supply of hand tools, benches and materials.

The forge shop contains twelve Buffalo forges with down draft which takes the smoke away through underground pipes, thus avoiding the smoke and dirt of the ordinary blacksmith shop. It also contains a shearing and a punching machine, twelve anvils of different weights, and all the necessary blacksmith tools for the twelve forges.

The wood shop contains one buzz planer, one large cylinder planer, circular saw, band saw, double spindle shaper, mortising and boring machine, five smaller lathes, one 18-inch patternmaker's lathe, and eighteen benches, each equipped with a complete set of carpenter's tools.

The foundry contains one Colliau cupola with a capacity of one and one-half tons of iron per hour, one brass furnace of 150 pounds capacity, a Buffalo pressure blower, and a coke oven.

The foundry is well equipped with moulder's tools, flasks, etc.

The boiler room contains two 75-horsepower boilers, one 40-horsepower boiler, feed pump, injectors, feed-water heater, measuring tanks, etc.

The various departments of the shop building afford facilities for giving practical instruction to sixty or seventy students at one time. Among the facilities for instruction in engineering contained in the equipment of the University in addition to the shop equipment may be mentioned:

A Dean steam pump with air chamber, water and steam cylinders, and valve chambers sectioned, so that a student may see the working parts.

A Cameron steam pump with a steam cylinder sectioned, showing the valve motion.

A Knowles pump in full working order.

A Blake steam pump in section.

Sections of injectors.

A model of a Stevenson's link motion.

A collection of samples of manufactured articles, such as steam pipe coverings, leather beltings, lubricating oils, etc.

## Drawing Room.

The equipment includes the usual tables and stools; and among the special apparatus and instruments may be mentioned the planimeter, odontograph, slide rule, etc. A blue-print room contains complete facilities for the details of the blue print process. One room is provided with photographic facilities, which will be used to prepare lantern slides and prints illustrating various branches of engineering.

#### Physical Culture Room.

A large room on the north wing of the main building is set apart for the use of the department of physical culture. This room has been furnished as far as means were available with the equipment necessary for systematic physical training.

## THE MUSEUM.

#### A. H. PURDUE, Curator.

The museum occupies the fourth floor of the south wing of the main building. Large additions have recently been made to its equipment with a view to facilitate instruction in geology and biology, and also to make it of increased interest to the visiting public. That portion of the collection suitable for display is arranged in glass cases, while the working collection is in drawers. Four new sloping-top cases with drawers beneath have recently been added, thus affording space for several thousand specimens.

Relief Maps. For illustration in geology and general interest to the public, there have been placed in the museum the following relief maps: Geological relief maps of the state of Arkansas, Colorado Canon, central Tennessee and the United States; a convex relief map of the United States on a section of a globe sixteen feet in diameter; a relief map of Carmel Bay, California; Ice Spring Craters, Utah; Yosemite Valley, Palestine, Mount Vesuvius, the state of California, and San Francisco Peninsula. Other maps are in preparation at the University.

The Mineral Collection. The mineral collection contains about 2,000 specimens, representing the different mineral groups. Many of these specimens are displayed in cases.

The Petrographic Collection. The most valuable part of this collection consists of the series furnished by the United States geological survey, representing sedimentary, igneous and metamorphic rocks. Besides this, there is a valuable collection of building and other stones from different parts of the country.

Paleontological Collection. There is a large collection of fossils in the museum, but as they have not yet been arranged and catalogued, the number of specimens cannot be even estimated.

The Major Earle Collection. Major F. R. Earle has deposited in the museum his private collection of minerals and fossils. This collection was formerly in Cane Hill College.

The Zoological and Botanical Collection. This collection consists of 200 birds and mammals, representing eighty species; 200 reptiles and amphibians, representing forty species; 1,500 fishes, representing 350 species; 1,000 insects and other invertebrates, representing 200 species; several skeletons.

Donations to the museum will be gratefully acknowledged, and the donors may be sure that anything of value sent to it will be carefully preserved and duly credited to the donor. Collections in the hands of private parties are likely to be soon scattered and destroyed through lack of care or improper handling. The museum is now prepared to receive collections on deposit, and to preserve and display the number of the owner's name until called for.

While the museum is most important on account of its educational value, it at the same time serves an important purpose in representing the resources of this state.

#### \*CONDITIONS OF ADMISSION.

Candidates for admission are urged to be present on the opening day of the session. Admission at a later date is not refused, but is attended with greater or less inconvenience.

Students on their arrival in Fayetteville should report promptly to the president. Needless delay in reporting or unseemly conduct may justify exclusion from the University.

Applicants should present certificates of honorable discharge from the school last attended, or furnish other testimonials of good moral character.

Entrance examinations will be required of all students entering the University except those who bring certificates from accredited preparatory schools or from other reputable colleges or universities. For the time at which these examinations will be held see page 38.

#### ADMISSION TO FRESHMAN CLASS.

The requirements for admission to the Freshman class consist partly of constants, or required subjects, and partly of electives. At present a student must present for admission to the B. A., B. S., and Normal courses thirty-one credits; to the engineering courses, twenty-four credits. One credit is regarded as the equivalent of one recitation of sixty minutes, or two recitations of thirty minutes each, in a study for a school year of thirty-six weeks. Below will be found a detailed statement of the requirements for admission to the different courses:

<sup>\*</sup>For terms of admission to the preparatory department see pages 44 and 45.

#### FOR B. A., B. S., AND NORMAL COURSES.

## Required:

English, 8 credits.

Algebra, 5 credits.

Plane Geometry, 4 credits.

United States History, 3 credits.

General History or Greek and Roman History. 3 credits.

Total, 23 credits.

Required in addition, 8 credits selected from the following groups:

Group A: Greek, 8 credits.
French, 8 credits.
German, 8 credits.

Physical Geography, 2 credits. Physiology, 2 credits.
Botany, 2 credits.
Zoology, 2 credits.
Physics, 2 credits.
Chemistry, 2 credits.

English History, 2 credits. Civil Government, 2 credits.
Bookkeeping, 2 credits.
Freehand Drawing, 2 credits.
Shop Work, 2 credits.

Candidates for the B. A. degree will be required to present eight credits from group A, all in one language.

Candidates for the B. S. degree, or for the Normal course, will be required to present eight credits selected from group A or B, or both.

#### FOR THE ENGINEERING COURSES.

# Required:

English, 8 credits.
Algebra, 5 credits.
Plane Geometry, 4 credits.
United States History, 3 credits.
Total, 20 credits.

Required in addition, 4 credits selected from Group A or B.

The following is a statement of the work in the different subjects, both required and elective, upon which will be based the entrance examinations:

English.

Eight Credits.

The examination will consist of two parts:

I. Reading and Composition—The candidate will be required to write a composition on one of eight topics, drawn in 1903, 1904 and 1905, from the following works:

Shakspere's Merchant of Venice and Julius Caesar; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

II. Careful Study and Composition—A certain number of books will be prescribed for careful study. This part of the examination will be upon subject-matter, literary form, and logical structure, and will also test the candidate's U. of A.-2.

ability to express his knowledge clearly and accurately. The books prescribed for this part of the examination in 1903, 1904 and 1905 are:

Shakspere's Macbeth, Milton's Lycidas, Comus, L'Allegro and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

The candidate is expected to read intelligently all the books mentioned in I. He should read them as he reads other books; he is expected, not to know them minutely, but to have freshly in mind their most important parts. In every case knowledge of the book will be regarded as less important than ability to write English. As additional evidence of preparation, the candidate may present an exercise book, properly certified by his instructor, containing compositions or other written work.

No candidate will be accepted in English, whose work is seriously defective in point of spelling, grammar, idiom, punctuation, or division into paragraphs.

In connection with the reading and study of the prescribed books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be committed to memory.

Algebra.

Five Credits.

To simultaneous quadratic equations, with special attention to factoring, the theory of exponents, and radicals. The examination will be taken from Wentworth's Higher Algebra.

## Plane Geometry.

Four Credits.

All of Plane Geometry will be required for admission to the Freshman class.

## United States History.

Three Credits.

The completion of Montgomery's Leading Facts or an equivalent.

# General History.

Three Credits.

The completion of Myers's General History or an equivalent.

## History of Greece and Rome.

Three Credits.

The completion of Myers's History of Greece and Myers's History of Rome, or equivalents.

# English History.

Two Credits.

Montgomery's English History, or an equivalent.

# Latin.

(a) First Latin Book complete; Text-book: Collar & Daniell, Bennett or an equivalent.

Four Credits.

(b) Caesar and prose composition. Four books of Caesar, with twenty-five lessons in Bennett's Latin Composition, or the equivalent.

Four Credits.

## Greek.

(a) The completion of White's Beginner's Greek, or an equivalent.

Four Credits.

(b) Three books of Xenophon's Anabasis, with the whole of Collar & Daniell's Greek Prose Composition.

Four Credits.

## Elementary German.

Four Credits.

The examination will be suited to the proficiency of those who have had the equivalent of German 1 (see page 68 of this catalogue), and will test (a) the candidate's knowledge of the rudiments of German grammar; (b) ability to read easy prose at sight, and (c) to translate simple English sentences into German. The candidate should have read 200 pages of easy prose.

#### Advanced German.

Four Credits.

The examination will be suited to the proficiency of those who have had the equivalent of German 2 (see page 68 of this catalogue), and will test the candidate's ability (a) to read modern German prose and poetry at sight, and (b) to translate easy English narrative into German. The candidate should have read 370 pages of the works of Riehl, Freytag, Heine, Lessing, Goethe, and Schiller, and thirty pages of lyrics and ballads.

## Elementary French.

Four Credits.

The examination will be suited to the proficiency of those who have had the equivalent of French 1 (see page 69 of this catalogue), and will include (a) the translation at sight of ordinary nineteenth century prose; (b) the translation from English into French of sentences to test the candidate's familiarity with elementary grammar. The candidate should have read 300 pages of simple prose.

## Advanced French.

Four Credits.

The examination will be suited to the proficiency of those who have had the equivalent of French 2 (see page 69 of this catalogue), and will test the candidate's ability (a) to translate standard French prose and poetry at sight, and (b) to turn easy English prose into French. The candidate should have read 600 pages in the works of such authors as Daudet, Loti, Sandeau, Corneille, Racine and Molière.

Chemistry.

Two Credits.

Remsen's Chemistry (Elementary Course), Freer's Elements of Chemistry, or Hessler & Smith's Essentials of Chemistry, or an equivalent; sufficient apparatus for the teacher to perform all the experiments.

Physics.

Two Credits.

Gage's Elements of Physics, Appleton's School Physics, or Hall & Bergen's Physics, or an equivalent; sufficient apparatus for the teacher to perform all the experiments.

Physical Geography.

Two Credits.

Davis's Physical Geography, or Gilbert & Brigham's Physical Geography, or an equivalent.

Physiology.

Two Credits.

Martin's Human Body, elementary course, or an equivalent.

Botany.

Two Credits.

Gray's Lessons in Botany and Vegetable Physiology, or an equivalent.

Zoology.

Two Credits.

Packard's Zoology, elementary course, and Boyer's Laboratory Guide, or an equivalent.

#### Civil Government.

Two Credits.

McLeary's Civil Government and Arkansas and the Nation, or an equivalent.

# Bookkeeping.

Two Credits.

Credits in bookkeeping will be given upon the certificate of the instructor stating the amount of work done, when accompanied by a complete set of practice books in double entry, satisfactorily written up.

## Free-hand Drawing.

Two Credits.

Drawings from models and machine parts, or credit may be given on good art drawings.

# Shop Work.

Two Credits.

Credits in manual training, carpentry, machine shop, forge shop or foundry will be accepted.

## ORDER OF EXAMINATIONS FOR ADMISSION.

Wednesday, September 16.—9 a. m., registration of students; 1 to 3 p. m., Geometry.

Thursday, September 17.—1 to 4 p. m., Algebra.

Friday, September 18.—1 to 4 p. m., Latin.

Saturday, September 19.—9 to 10:30 a. m., Reading and Composition; 10:30 to 12 m., Careful Study and Composition; 1 to 2:30 p. m., U. S. History; 2:30 to 4 p. m., General History.

The order of examinations in other subjects will be announced at the opening of the University.

## EXAMINATIONS AT PLACES OTHER THAN FAYETTEVILLE.

Students living at a distance from the University may obtain special examinations near their homes if applied for in due time before the beginning of each session. The questions will be sent on application to the principal of any school or to any county examiner. The questions must be submitted by the principal or county examiner to the candidate under the usual restrictions of a written examination, and the questions and answers must be returned by the same officer to the University with his endorsement that the examination was properly conducted.

#### ADMISSION BY CERTIFICATES.

The graduates of accredited schools are admitted to the Freshman class in the University without examination, provided, in all cases, certificates from the principal of the school attended be presented, containing specific statements of the kind and extent of work done in the studies in which credits are desired. Blank forms for such certificates will be furnished by the University. Students from schools regularly accredited to other reputable colleges and universities will be admitted to the Freshman class without examination, provided they present evidence that such schools are duly accredited and that they have completed the work required for admission to the Freshman class of this University in the courses which they desire to take.

A student who presents a certificate of scholarship from a high school, academy, or college not on the list of accredited schools, is required to take such examinations as may be prescribed. The result of such examinations, together with the certificates, will be passed on and proper credit allowed by the professors of the departments which such student proposes to enter.

#### ADMISSION TO ADVANCED STANDING.

Candidates for admission to classes in advance of the Freshman will be required to pass satisfactory examinations in the subject previously pursued by the class which they propose to enter. But such candidates coming from colleges or universities of good standing may on the presentation of the proper certificates as to the studies pursued be admitted provisionally to such standing and upon such terms as the faculty may deem equitable in each case.

#### ACCREDITED SCHOOLS.

On application from the principal of any high school, academy, or other institution, an officer of the University will visit and examine the organization and work of such school. The points to be observed are the subjects included in the course of study, the extent of instruction in each subject, the text-books used, the length of the session, length of the recitation hours, methods of teaching, facilities for instruction, and the discipline. Upon a favorable report, submitted in writing by the visiting officer, the school is declared by vote of the faculty duly accredited to the Freshman class of the University.

Any changes that may occur, especially in the principalship of the school, or in its course of study, should be reported to the president of the University, as the list of accredited schools is subject to yearly revision. The University earnestly desires to cultivate friendly and harmonious relations with all other educational enterprises of the state, and to add to its list all schools that are doing the required work and that desire to assume the accredited relation.

# 

Bellefonte High School	Principal, W. D. Jeter.
Fort Smith High School	Principal, B. W. Torreyson.
Little Rock High School	Principal, Howard Gates.
Marianna High School	Principal, C. L. O'Daniel.
Lonoke High School	Principal, A. J. Meadow.
Pine Bluff High School	Principal, J. H. Witherspoon.
Paris (Tex.) High School	Principal, J. G. Wooten.
Helena High School	Principal, S. H. Spragins.
Hot Springs High School	Principal, Geo. B. Cook.
Amity High School	Principal, S. M. Samson.
Paris Academy	Principal, G. S. Minmier.
Dardanelle High School	Principal, W. T. Blount.
Eureka Springs High School	Principal, C. S. Barnett.
Southwestern Academy, Magnolia	Principal, J. M. Williams.
Texarkana High School	Principal, W. S. Horton.
Hope High School	Principal, J. T. Shipman.
Thompson's Classical Institute, Par	agould
Fordyce Training School	
Camden High School	
Spears-Langford Military Academy, S	
Van Buren High School	
Green Forest Academy	
Arkansas Cumberland College	
Springdale High School	
Salem High School	
Batesville Public Schools	Principal, T. E. Sanders.

#### GENERAL INFORMATION.

# Selection of Courses of Study.

Students are allowed all reasonable freedom in choosing their courses of study. But they are required to pursue their studies in the order prescribed, and, when candidates for a degree, to complete, as a condition of graduation, all the subjects in the course leading to such degree. Changes in the course of study selected are discouraged, but for sufficient reasons are allowed if made within three weeks after admission; subsequently no such change can be made during the session except by the express permission of the faculty.

#### Number of Recitations.

Not less than twelve nor more than eighteen recitations or their equivalent per week, exclusive of military science and tactics, are allowed, except by permission of the faculty. Two hours of laboratory, shop or farm work, drawing or sight-reading, are counted equivalent to one recitation. If less than twelve recitations or their equivalent per week are specified in any course, studies must be elected to make up the deficiency.

## Classification of Students.

The satisfactoy completion of the work of a class as attested by daily recitations and examinations is the condition of enrollment in a higher class. Some margin, however, is allowed for making up studies in arrears. But more than six hours per week required for such studies or more than six hours per week omitted from the studies of a given

class prevents enrollment therein, except that in the engineering courses the number in both cases may be as many as eight. No student can be classified as Freshman in any course who has more than six hours per week of unfinished preparatory work.

## Special Students.

- 1. Students are advised to pursue, in all cases in which it is practicable, some one of the regular courses leading to a degree. The number of these courses with the liberal provision for electives allows sufficient play for individual preference in the selection of subjects required for a liberal and well-rounded education.
- 2. Students who are not candidates for a degree, but who have completed all the studies below the Freshman class, may elect a special course of study under the supervision of the classification committee and with the approval of the professors in charge of the subjects chosen.
- 3. Persons not less than twenty-one years of age may elect a special course of study under the direction of the faculty, provided they show by examination or otherwise that they are qualified to pursue profitably the studies which they propose to take up.
- 4. Students in special courses are subject to the same regulations and to the same examinations in the studies pursued as all other undergraduate students.

## Examinations.

 Examinations, chiefly in writing, are held near the end of each term. The grades are determined by combining the values of the daily recitations and of the examinations, and are divided into four groups, as follows: "Excellent" (E); "Good" (G); "Fair" (F); "Poor" (P). A grade not lower than "Fair" is required for a "pass," which is the equivalent of about 75 per cent. At the end of each term a report is made to the parent or guardian of each student showing his progress, general conduct, etc.

- 2. If a student has failed in any study, he may nevertheless be allowed to take up the next study in advance, provided he be deemed by the professor in charge of the department to which such study belongs not incompetent to pursue it; but he will be required to pass a satisfactory examination in the study in which he failed, or take it up with the next class.
- 3. If a student has proved competent to continue his advanced work, but has not completed all the preceding studies in his course, he must resume the latter, and if he be found to be overworked, he will be required to drop part of his advanced work.

# Appointment of Beneficiaries.

Beneficiary appointments entitle the holders to free tuition. Such an appointment may be obtained from the county judge of the county in which the student resides, or from the president on arrival at the University. The total number of beneficiaries allowed to the state is 1,000, a number that is still largely in excess of the number of holders of these appointments.

## Expenses.

It is the object of the University to give the best possible education at the lowest possible cost. Tuition is free to all students. A matriculation fee of five dollars is charged all

candidates for admission. The following estimates are taken from the actual expenses of students for the session of 1901-1902.

	Low.	Medium.	Liberal.
Clothes, Including Uniform\$	20.00	\$ 25.00	\$ 45.00
Board, Laundry, etc	95.00	112.00	135.00
Books, Instruments, etc	10.00	15.00	15.00
Incidentals	15.00	25.00	35.00
Matriculation Fee	5.00	5.00	5.00
\$	145.00	\$182.00	\$235.00

Fees are payable in advance. Board bills are payable monthly in advance.

A diploma fee of \$5 is charged all graduates. All dues are to be paid or satisfactorily adjusted before diplomas are conferred.

#### Student Labor.

A large part of the student body work during vacant hours to meet part of their expenses.

The legislature has provided a fund known as the "Student Labor Fund," which provides work for deserving young men who need help to meet their college expenses. Considerable manual labor is necessary to carry on the various departments of the University, and students who desire to work are employed when practicable and paid at the rate of ten cents per hour. The requests for work always exceed the amount of money appropriated and the University makes no promises to furnish employment for wages to all who apply.

Board for Young Men.

Rooms in the University dormitories are free, but occupants provide their furniture, fuel, and lights. Students leaving the University frequently sell their furniture at a small reduction. If there are not rooms enough for all, preference is given to Arkansas students. An officer of the University is in charge of the building, and the rooms are inspected by the faculty whenever deemed necessary.

Students boarding elsewhere are under the supervision of the president of the University, and are allowed to board only at places approved by him. No student is allowed to change his boarding place without the consent of the president.

Board for Young Women.

Sufficient funds have not yet been secured to provide a dormitory for young women, but all necessary assistance is rendered them in finding homes in private families in the town. Parents, therefore, who send a daughter to the University, should place her under the control of the family with whom she boards, subject to the general supervision of the president of the University.

Note.—The Committee on Reception will meet all trains and assist the incoming students in fluding eligible boarding places.

#### Absences and Withdrawals.

Absences from the University during the session are not permitted except for valid reasons. The right of a parent to withdraw his son at any time, without reason assigned, is recognized, but without so withdrawing him, he cannot relieve him of the obligation to attend to his duties at the University. The incidental absences of students during the session are exceedingly disadvantageous, both to themselves and to the University. While, therefore, the president permits them, in cases where propriety or urgent necessity seems to make them unavoidable, it is held to be a duty to inquire into the reasons for which the permission is solicited.

Parents or guardians who wish to withdraw their children or wards from the University should write to the president stating their wishes. No honorable discharge will be given to a student under age who is unable to produce the written application of his parent or guardian for his withdrawal, nor will an honorable discharge be given to a student under censure of any kind, whether for neglect of duty or other cause, even though he may have the consent of his parent or guardian for his withdrawal from the University.

## Sale of Ardent Spirits Prohibited.

By an act of the general assembly of the state of Arkansas, approved March 6, 1875, it is unlawful for any person to sell or give away any vinous or ardent spirits within three miles of the University of Arkansas, unless it be prescribed by a regular practicing physician for medicinal purposes.

## Literary Societies.

There are three literary societies, the Mathetian, the Garland, and the Periclean. Their meetings, which are held weekly, afford excellent opportunities for improvement in declamation, composition, debate, etc. Renewed interest in this valuable means of culture is shown by the students.

# The William Jennings Bryan Prize.

A prize fund of \$250 has been bestowed upon the University through the liberality of Hon. W. J. Bryan, of Nebraska, and a prize named in his honor and consisting of the annual income of this fund will be offered each year, provided productions worthy of its bestowal be presented.

The prize will be awarded for the best essay on some topic relating to the problems of government, and the subjects for competition will be selected in alternate years by the department of economics and sociology and the department of history. The contest will be open to students who have junior or senior standing, more than half of whose work has been of the grade G, and to special students in the collegiate department who have thirty-two hours' credit of a similar grade.

The subject for the year 1903-1904 will be announced in September, 1903. Further details of the plans of competition may be obtained from the professor of history. The competitive essay must be submitted by the first of May, 1904.

## The Johnson Prize.

Professor W. S. Johnson offers a valuable loving cup to be competed for in an oratorical contest open to the members of the three literary societies.

## Prize in the Garland Society.

Professor G. A. Cole offers a prize to be competed for by the members of the Garland Society. This prize is for the greatest improvement in debate.

# Prize in the Periclean Society.

Professor J. W. Carr offers, in memory of General Albert Pike, a prize to be competed for by the members of the Periclean Society. This prize is for the best recitation of a selection from Shakspere's works.

# OFFICERS OF STUDENT ORGANIZATIONS.

	Garland Literary Society.				
J	C. Blaylock				
	7. O. Wilson				
	H. BeardSecretary.				
	W. Cartwright				
	, in determinant				
	Periclean Literary Society.				
VA	H. Pollard				
	H. Ingersoll				
	W. Gardner Secretary.				
1	S. Howard				
23.	. B. Howard				
	Mathetian Literary Society.				
۸	M. Honnett				
	E. Myrick				
	iss L. Droke				
	Hamilton				
124	Hammton				
	Oratorical Association.				
	O. Wilson				
	red HoltVice President.				
M	. L. Cotton Secretary and Treasurer.				
ľ	Young Men's Christian Association.				
U	C. Swearingen				
	R. Wilson				
	oy Legate				
1000	L. Cotton				
200	3, 000000000000000000000000000000000000				
	Senior Class.				
B	W. Langford				
100	iss Hattie Melton				
	iss Madge Bates				
	see made Dates				

Miss Roulah Williams

# 

Miss Beulan Williams	ecretary.		
Freshman Class.			
Alcuin Eason	President.		
Frank Fergus			
Miss Clifton Reed	The Court of the C		
Athletic Association.			
L. B. Bryan	resident		
Marvin Harris			
Football Team.			
L. B. Bryan	Cantain		
Abner McGehee			
Abher Medence	marrager,		
Baseball Team.			
	Contain.		
L. B. Bryan.  Elbert Clark.			
Elbert Clark	manager.		
Tennis Club.			
Fay Webster	manidant		
T. Quarles			
1. Quaries	ecretary.		
Dormi'ory Discipline Club.			
Roy Milum			
Abner Beard	ecretary.		
Track Team.			
A. M. Honnett	Manager.		
A. M. Homett	a		
	3 - 2 - 2 - 2		

#### RELIGIOUS EXERCISES.

Religious exercises are held regularly in the University chapel at a given period during each daily session. Students are required to attend.

The churches of Fayetteville cordially welcome the students to their Sunday schools and various meetings for prayer and religious instruction. The denominations represented in the city are Baptist, Presbyterian, Cumberland Presbyterian, Methodist Episcopal, Methodist Episcopal South, Protestant Episcopal, Christian, Roman Catholic, and Union. Many of the students are actively engaged in the work of the different church societies and guilds. The Young Men's Christian Association holds regular meetings, and a commendable interest is shown in its work. Two Bible classes have been organized and weekly recitations are conducted by the officers of the University.

## ATHLETIC ASSOCIATION.

The purpose of this organization is to encourage the development of the physical man.

The association as originally formed consisted of the U. of A. Athletic Club, the U. of A. Tennis Club, the U. of A. Baseball Club, and the U. of A. Football Club; and it is further provided that if any other club, organized by the students of the University for the practice of any sport, game, or exercise, not already represented by one of the members of the association, shall make a written application for membership in the association, and the said application shall be approved by the governing body of the association, the petitioning club shall become a member of the association with all the rights and privileges pertaining to such membership.

UNIVERSITY OF ARKANSAS LIBRARY

# FACULTY RULES FOR THE GOVERNMENT OF ATHLETICS.

- Rule 1. No one shall participate in any sport as a member of a team representing the University unless he be a *bona fide* student doing full work in a regular or special course as defined in the catalogue.
- Rule 2. No person shall be admitted to any athletic contest who receives any gift, remuneration, or pay for his services on the college team.
- Rule 3. No student shall be permitted to participate in any athletic contest who is found by the faculty to be a delinquent in his studies.
- Rule 4. The elections of managers and captains of all athletic teams shall be subject to the approval of the faculty committee on athletics.
- Rule 5. Before every athletic contest in which a University team is to be engaged, the captain of such team shall submit to the chairman of the faculty committee on athletics a list of the players eligible under the rules to participate in said contest. It shall be the duty of the captain to exclude all players from the contest except those so certified.
- Rule 6. The faculty committee on athletics shall require each candidate for a team to represent the University to subscribe to a statement that he is eligible under the letter and spirit of the rules adopted by the faculty.
- Rule 7. No person having been a member of a college athletic team during any year and having been in attendance less than one college half year shall be permitted to play on any athletic team thereafter until he shall have been in attendance six consecutive calendar months.

#### MILITARY DEPARTMENT.

The head of this department is an officer of the United States army detailed by the war department for duty at the University.

All male collegiate students are required to take the theoretical course, and all male students over fifteen years of age, not physically disabled, are required to take the practical course in military science, the latter including infantry drill, target practice, camping, guard duty, and various other exercises, the course covering the entire period of the student's stay at the University.

The act of congress donating public lands for educational purposes requires that institutions which are the beneficiaries of such donations include military science and tactics in their course of instruction

The system of practical instruction closely follows that used in the United States army. It contains a course of gymnastic exercises for the development and improvement of the arms, chest, legs, hands, and feet. Besides being excellent physical training, this instruction has many advantages mentally. The necessity of being alert, listening for each word of command, and acting promptly on it, quickens the wit and cultivates the habit of fixing the attention and concentrating the thoughts. In addition to all this, it inculcates in the student a respect for authority and discipline which is equalled by no other system.

The cadets are organized into one battalion, composed of field staff, band, and six companies. The officers and noncommissioned officers are selected from those students who are most proficient in their drill and military studies, and most exemplary in their deportment, the captains and lieutenants being taken, usually, from the Senior and Junior classes, and sergeants and corporals from the Sophomore and Freshman classes. An office in one of the battalions is one of merit and distinction, and any unbecoming conduct subjects the appointee to reduction to the ranks.

The cadet band, of some twenty pieces, constitutes an interesting feature of the military organization. It receives the best instruction obtainable, practices three hours per week. and takes part in all military ceremonies.

A competitive drill is held annually at the close of the college year, when prizes are awarded for proficiency in this department.

## Competition Among the Companies.

At the competitive drill, held in June, 1902, and participated in by five companies of the corps of cadets of the University of Arkansas, Company "E" made the highest score. The following is the roll of the officers, non-commissioned officers, and privates who participated in that contest and were members of the company at that time:

#### COMPANY "E"

#### MEMBERS PRESENT AT COMPETITIVE DRILL 1902.

Captain, Baxter, J. W. Second Lieutenant, Blaylock, J. C. (acting First Lieutenant). Second Lieutenant, Brewster, H. First Sergeant, Phillips, C. O.

#### SERGEANTS

Bickel, A. Muller, J. F.

Castleberry, W. L.

McCrary, E. W. Vaulx, G. W.

Ramsey, C. C.

Womack, J. P.

CORPORALS

Kunz, E. H.

#### PRIVATES

Boles, E. C.	Field, T.	Pollard, W. A.
Borders, J. M.	Foreman, C. D.	Pratt, D. H.
Brown, G. W.	Gardner, O. H.	Revel, J. W.
Cartner, E. C.	Hardin, M. P.	Ross, J. E.
Cleveland, G. W.	Kitchens, B. M.	Smith, H. G.
Conway, W. B.	Little, E. L.	Sadler, W. L.
Crawford, W. R.	Mercer, C. F.	Seamons, P. S.
Dabney, F. M.	Mashburn, E. E.	Trigg, J. W.
Deane, S. E.	Mons, L. A.	Ware, B. L.
Dearing, W. N.	Nordmeyer, C. D.	Yoakman, H. M.

## Captain's Competition.

To Captain J. W. Baxter, of Company "E," was awarded the sword for being the best drilled captain.

# Individual Competition.

To Sergeant H. P. Jordan, was awarded a gold medal for being the best drilled non-commissioned officer.

To Cadet J. E. Ross was awarded a gold medal for being the best drilled private.

# Army Appointments.

The three students of the senior class having the highest grade of merit in this department are reported to the secretary of war, and their names are recorded in the adjutant general's office and published in the Army Register for that year. The president of the United States, in appointing officers from civil life, gives preference to those whose names are so recorded. Cadet officers on graduation are brevetted in the state guard with the rank held by them in the cadet battalion at the date of their graduation, and recommendations of the commandant of cadets as to special military qualifications of the graduates of the military course

are filed in the office of the adjutant general of the state and considered in appointing commissioned officers of the state guard.

A neat uniform of gray cloth, with brass buttons and black trimmings, is required to be worn by all cadets at drill. The uniform, complete, costs about \$15, and with ordinary care will last an entire year.

#### ORGANIZATION OF THE CORPS OF CADETS FOR THE YEAR 1902-1903.

Captain Lanning Parsons, Eighth Cavalry, U. S. Army, Commandant.

#### STAFF.

Adjutant, Swearingen, S. C. Commissary, McGehee, A. Sergeant-Major, Cotton, M. L.

C. Quartermaster, Mitchell, S. A.
Battalion Adjutant, Brewster, H.
M. L. Quartermaster Sergeant, Ruggles, W. A
Color Sergeant, Leverett, E. V.

#### COMPANY "A"

Captain, Womack, J. P.

First Lieutenant, Pratt, F. H. Second Lieutenant, Jordan, G. W. First Sergeant, Stafford, A. F.

SERGEANTS

Oakes, G. C. Jones, C. W.

Pratt, D. H.

Beard, A. H. Dickinson, W. E.

Cromwell, C. W.

Carter, E. L. Boles, E. C.

Mackey, D. E.

CORPORALS

#### COMPANY "B"

Captain, Mitchell, B.

First Lieutenant, Wilson, J. R. Second Lieutenant, Holt, F. W. First Sergeant, Bryan, L. B.

SERGEANTS

Ragland, H. S. Webster, Fay.

Jackson, B. O. Eason, A. P.

CORPORALS

Foreman, C. D. Vanwinkle, C. P. Snapp, W. L.

Dickinson, H. J.

Wilson, C. P.

#### COMPANY "C"

Captain, Phillips, C. O.

First Lieutenant, Carothers, N. Second Lieutenant, Longino, J. L. First Sergeant, Risser, T. S.

SERGEANTS

Berry, F. H.

Croom, C. W.

CORPORALS

Cochrane, L. H. Ingersoll, W. H.

Webb, C. W.

Stone, B. H. McCrary, E. W.

Faucette, K. S.

Sengel, J.

#### COMPANY "D"

Captain, Abercrombie, J. S.

First Lieutenant, Kunz, E. H. Second Lieutenant, Wood, C. F. First Sergeant, Honnett, A. M.

SERGEANTS

Bloom, J. R. Mullins, G. W.

CORPORALS

Mitchell, L.

Cheatham, W. R.

McKennon, B. C. Mitchell, R. C.

McGehee, B.

Walker, J. W.

Reves. C. M.

#### COMPANY "E"

Captain, Austin, R. L.

First Lieutenant, Van Valkenburg, H. B. Second Lieutenant, Gray, C. W. First Sergeant, Taylor, R.

SERGEANTS

Chappel, E. W. Quarles, T. C.

Morrow, D. B. Milum, R. W.

CORPORAL

Sadler, W. D. James, J. J.

Schicker, E. B. Mullins, T. C.

Rowe, R. E.

## AGRICULTURAL EXPERIMENT STATION.

R. L. BENNETT, M. S., Director.

R. R. DINWIDDIE, M. S., Pathologist and Bacteriologist.

C. L. NEWMAN, M. S., Agriculturist.

EARNEST WALKER, B. S. A., Horticulturist and Entomologist George B. Irby, B. A., Assistant in Feeding Experiments.

J. F. MOORE, B. S., Chemist.

The national government established the experiment station as a department of the University in 1887, and maintains it to investigate agricultural problems for the aid of the farmers of the state.

The work of the experiment station is divided into the special lines of agriculture, horticulture and entomology; chemistry, animal and plant diseases; animal production, pomology and farmers' institute work. Specialists are employed in each line, and experiments are made both in the field and laboratory in the improvement of soils, the rotation of crops, diseases of plants and domestic animals, in fertilizers, the value of stock foods, dairying and other matters. Students interested in agricultural subjects are given opportunity to observe the experiments and to acquaint themselves with the work of the station in its various departments; the bulletins are also available for their use. The experiments and their results are published in bulletins, which are sent free to farmers, stock raisers and fruit growers of the state, and to others interested in agriculture.

Those who desire the station bulletins should apply for them to the director of the station, Fayetteville, Ark. One application is sufficient to obtain all future bulletins if desired.

#### DEGREES.

The following degrees are conferred by the University. For undergraduate work:

Bachelor of Arts (B. A.).
Bachelor of Science (B. S.).
Bachelor of Civil Engineering (B. C. E.).
Bachelor of Mechanical Engineering (B. M. E.).
Bachelor of Electrical Engineering (B. E. E.).

# For graduate work:

Master of Arts (M. A.). Master of Science (M. S.). Mechanical Engineer (M. E.). Civil Engineer (C. E.). Electrical Engineer (E. E.).

All the courses leading to the different bachelor's degrees are based on four years of collegiate work. The B. A. and B. S. courses are designed to give the student liberal culture; while the engineering courses are technical. The B. A. and B. S. courses are almost entirely elective, certain safeguards and restrictions being thrown around the student's choice of electives; the technical courses necessarily consist principally of prescribed work.

For specific and detailed statements of B. A. and B. S. courses, see pages 59 and 60; for civil engineering, see page 94; for mechanical engineering, see page 89; for electrical engineering, see page 98; for normal course, see page 85; for courses leading to graduate degrees, see pages 65 to 101.

# COURSES OF STUDY LEADING TO THE B. A. AND B. S. DEGREES.

English FRESHMAN. *3	Periods.			
Mathematics	Periods.			
A Foreign Language				
SOPHOMORE.				
English3	Periods.			
The Foreign Language pursued in Freshman Year3	Periods.			
Some study pursued in Freshman Year 3	Periods.			
Elective6	Periods.			

<sup>\*</sup>No g.—A period means one recitation per week throughout a college year, or the equivalent in laboratory work.

#### 

SENIOR.

## Conditions.

- 1. 60 periods are required for graduation.
- 2. At or before the beginning of the Junior year the student shall elect a major subject, and 24 periods of the 60 required for graduation shall be subject to the approval of the professor in charge of the major subject. Not more than 18 periods may be taken in any subject, and not more than 36 periods in any group.
- 3. Candidates for the B. A. degree shall choose their major subject from group I, II, or III, and shall offer not fewer than 9 periods from each of these groups. Not more than 9 periods may be offered from group IV. In the foreign language pursued in the Freshman year the equivalent of two years' work must be offered for admission.
- 4. Candidates for the B, S, degree shall choose their major subject from group II or IV and shall offer not fewer than 18 periods from one or both of these groups.
- 5. In both courses the elective work of the Freshman and Sophomore years must include at least 3 periods from each of groups II and III.
- 6. In addition to the above requirements, military science and tactics will be required of male students, or whenever they are excused, one period per year in other work. One period per year in music, art, elocution, physical culture, or other work, will be required of female students.

## Groups.

- I. English, Latin, Greek, French, German, Spanish, Italian.
- II. Mathematics, Astronomy, Chemistry, Physics, Geology. Biology.
- III. History, Philosophy, Political Science, Economics, Sociology, Pedagogy.
- IV. Mechanical, Civil, and Electrical Engineering, Horticulture, Agriculture.

## REQUIREMENTS FOR THE MASTER'S DEGREE.

- 1. A bachelor's degree from this University or another institution in which the course of study pursued is recognized as fully equivalent.
- 2. That not less than one year intervene between the conferring of the bachelor's and master's degrees.
- 3. That a course of study in one major and two minor subjects aggregating, with a thesis, sixteen hours per week be pursued in residence at the University for not less than one year. But graduates of this University may do half their work in absence under the direction of the professors in charge of the subjects chosen, provided that residence at the University during the term preceding final examination for the degree is required.
- 4. That the major subject covering six hours shall be strictly graduate work, and selected in a department in which all undergraduate work has been previously completed.
- 5. That the two minor studies aggregating eight hours per week shall be chosen from departments in each of which the candidate has already two years credit, provided that no work credited to the bachelor's degree shall be counted toward the master's degree.
- 6. A satisfactory thesis in the major subject, the theme of which shall be approved by the head of the department six months before the final examination. For the thesis a credit of two hours shall be given.
- 7. That the candidate shall hand to the professor in charge of the major subject the thesis on or before the 15th of May. Previous to his final examination the candidate shall be questioned on his thesis by a committee composed of

the professors in charge of the major and minor subjects and a professor of another department to be designated by the faculty.

# REQUIREMENTS FOR THE DEGREES OF C. E., M. E., OR E. E.

These courses of study are intended to give additional preparation for those students who have finished an undergraduate course in engineering, for some special line of work to which their previous study has led. The student will have all reasonable liberty in selecting such specialties and will be limited only by certain general requirements. He will be required at the beginning of the year to make up the course which he proposes to follow and to present it to the faculty, approved by the instructors concerned. If accepted, it will be subject to change only by the faculty. In general, it is expected that these courses shall comprise one principal subject based on the course already pursued, and two secondary subjects, one or both of which should be closely related to the principal. The graduate course should amount to not less than fifteen recitation hours per week as counted in undergraduate work.

The subject of a thesis for any of the above degrees must be submitted to the faculty for approval before the middle of the second term.

These degrees will also be given to graduates in civil, mechanical and electrical engineering who have been in successful practice of their profession for three years, and who have submitted a satisfactory thesis on a subject approved by the faculty.

Charges. Graduate students pay \$10 for matriculation and registration, \$10 tuition (non-residents, \$5) at the beginning of each session, and \$10 in advance for the final examination. Students who fail to comply with any of these requirements, or who do not each year complete the equivalent of two terms' work in one subject, will be dropped from the rolls. Should such students desire to resume their studies, they must pay for matriculation and registration, as if beginning for the first time. The diploma fee is \$5 in advance in each case.

Graduates attending only undergraduate classes pay the same fee as undergraduates.

Non-resident students have such assistance and instruction in their studies as can be conveniently given by correspondence.

## HONORS.

Students who have attained grade "E" in work aggregating fifty hours per week (counted on the basis of a four years' course) are granted degrees "with special distinction."

Students who have attained grade "E" in work aggregating thirty-two hours per week, or grade "E" or "G" in work aggregating fifty hours per week, are granted degrees "with distinction."

## TEACHERS' NON-RESIDENT COURSES.

The University offers special opportunities to all teachers in Arkansas. It will admit them to its regular examinations for admission to the Freshman class, or will send the examination questions to county examiners, who will submit them to teachers under the usual rules, and return

answers to the University. Teachers who pass the required entrance examinations may then matriculate and enter upon non-resident courses of study under the direction of the University professors; and, upon completion of one term's work in any branch, they will be examined upon said work and credited with it, if it comes up to the University standard.

After finishing three-fourths of the course for a bachelor's degree, such teacher-students may graduate by completing the course as regular resident students.

Non-resident study is pursued under disadvantages, and none but energetic and methodical persons, who are willing to practice much self-denial, can succeed in such work. Such courses of study are in many respects less thorough than study under regular instruction at the University. Yet thousands of persons who cannot attend college regularly are thus educating themselves; and the self-reliant habits of study and investigation acquired by successful work of this kind are of untold value.

Teachers accepting this offer must obtain not less than two credits (two subjects passed for one term, or one subject for two terms), each year; else their names will be dropped from the rolls. Teachers whose vacation occurs during the session of the University may supplement their non-resident study by attending the regular classes.

# \*DESCRIPTION OF COURSES.

#### ANCIENT LANGUAGES.

J. C. FUTRALL, Professor.

Owing to the limited force of the department it was found necessary in 1902-1903 to omit one course in Greek and one in Latin. It is hoped that it will be possible in 1903-1904 to give all the courses offered. During the past year Associate Professor Dunn has had charge of the classes in Greek 1 and 2.

#### Latin.

- 1. CICERO'S ORATIONS AND VIRGIL (3)—An accurate knowledge of the Latin forms is insisted upon; Bennett's Latin Prose Composition throughout the year. For Freshmen.
- 2. CICERO AND LIVY (3)—Cicero's de Amicita et de Senectute; Livy, Book I or II. Systematic study of the grammar; exercises in prose composition, based chiefly upon the authors read in class; sight reading; Roman literature. For Sophomores.
- 3a. PROSE COMPOSITION (1)—The translation of connected passages of idiomatic English into idiomatic Latin. *Prerequisite*: Course 2.
- 4. HORACE AND CICERO (2)—Horace, Odes and Epodes; Cicero's Letters; parallel and sight reading; the metres of Horace. Prerequisite: Course 2.
- 5. ROMAN POETS (3)—Readings will be taken from Plautus, Terence, Catullus, Horace and others, and the attention of the students will be directed rather to the literary side of the authors

U. of A.-3.

<sup>\*</sup>The number to the left of the description of a course is the number of the course; the number to the right is the number of hours per week that the course is given. In general two hours of laboratory work are considered as the equivalent of one hour of recitation. Thus a course that has two hours per week of recitation work and two hours of laboratory work is a three hour course. Unless the contrary is stated in the description of a course, all courses run throughout the year.

read than to grammatical and syntactical peculiarities. Course 5 may be taken twice and counted towards a degree, as the readings will be changed in successive years. *Prerequisite*: *Courses* 3a and 4.

Text-books: Bennett's and Gildersleeve's Grammars; Wilkin's Primer of Roman Literature; Cruttwell's Roman Literature. Any approved edition of the Latin authors may be used, except when certain editions are prescribed. Lexicons: Harper, Lewis, White,

#### Greek.

- 1. ELEMENTARY COURSE (3)—White's Beginner's Greek Book, with selections for reading. A thorough mastery of the forms and constructions given in this book is required. For Freshmen.
- 2. Xenophon and Lysias (4)—This course is intended to familiarize the student with all the ordinary Attic forms and constructions; frequent exercises in oral and written translation of English into Greek, based upon the text read, are given, and some practice in sight reading; Goodwin's Grammar. For Sophomores.
- 3. Homer and Plato (3)—Systematic study of the grammar; prose composition; Greek literature; sight reading. *Prerequisite*: Course 2.
- 4. Thuoydides and the Drama (3)—This course will be conducted on the same plan as Latin 5. *Prerequisite*: Course 3.

Text-books: Goodwin's Revised Greek Grammar; Goodwin's Greek Moods and Tenses; Pearson's Prose Composition; Higley's Exercises in Greek Composition. Any approved edition of the Greek authors may be used, except when certain editions are prescribed. Liddell and Scott's Lexicons are recommended.

#### ENGLISH AND MODERN LANGUAGES.

J. W. CARR, Professor.

E. F. SHANNON, Associate Professor.

MISS H. B. DAVIES, Adjunct Professor.

## English.

1. ELEMENTARY COMPOSITION (3)—A. S. Hill's Principles of Rhetoric (revised and enlarged edition), Matthews's Introduction to American Literature, Halleck's History of English Literature.

Recitations, class-room themes and other written exercises, memorizing of poetry, and assigned reading. The class will meet once a week for instruction in the history of American and English literature. For writing and rewriting themes and for recitations in rhetoric and poetry, the class will be divided into sections, meeting twice a week. Required of all Freshmen.

Associate Professor Shannon. Adjunct Professor Davies.

2. ADVANCED COMPOSITION (3)—Genung's Working Principles of Rhetoric and Moody & Lovett's History of English Literature. Recitations, lectures, short class-room themes, long fortnightly themes, memorizing of poetry, and assigned reading. The class will meet once a week for recitations and lectures on the history of English literature. For writing and rewriting short themes and for recitations in rhetoric and poetry, the class will be divided into sections, meeting twice a week. Required of all Sophomores in the B. A. and B. S. courses. Elective for all others who have completed English 1.

ASSOCIATE PROFESSOR SHANNON.

ADJUNCT PROFESSOR DAVIES.

- 4. Shakspere (2)—A limited number of plays, chosen to illustrate the successive periods, will be carefully studied. The course will deal also with Shakspere's language, his versification, the construction of his dramas, and the theory of dramatic poetry. Prerequisite: English 2.

  Professor Carr.
- 5. OLD AND MIDDLE ENGLISH (2)—An elementary course in the language and literature of the Anglo-Saxon and Middle English periods. Prerequisites: English 1 and German 1. Omitted in 1903-1904.

PROFESSOR CARR.

- 6a. ENGLISH LITERATURE OF THE SIXTEENTH CENTURY (2)—Special attention will be paid to the period beginning with Tottel's Miscellany, and ending with the death of Spenser (1557-1599). Prerequisite: English 2. Omitted in 1903-1904.
- 7a. ENGLISH LITERATURE OF THE SEVENTEENTH CENTURY (2)— English literature from the death of Spenser to the death of Dryden (1599-1700). Prerequisite: English 2.

ASSOCIATE PROFESSOR SHANNON.

- 8. ENGLISH LITERATURE OF THE EIGHTEENTH CENTURY (2)—
  English literature from the death of Dryden to the publication of
  the Lyrical Ballads (1700-1798). Prerequisite: English 2. Omitted
  in 1903-1904.

  ASSOCIATE PROFESSOR SHANNON.
- 9. English Literature of the Nineteenth Century (2)—English literature from the publication of the Lyrical Ballads to the death of Queen Victoria (1798-1901). Prerequisite: English 8, unless English 9 and either 4 or 7a are taken simultaneously.

ADJUNCT PROFESSOR DAVIES.

Note.—English 4, 6a, 8 and 5, 7a, 9 will be given in alternate years, so that students who wish may cover the whole field of English literature.

#### German.

1. ELEMENTARY COURSE (3)—Thomas's Grammar, Guerber's Märchen und Erzählugen, Wesselhoeft's German Composition; constant practice in pronunciation; translation of 200 pages of easy German; sight reading; oral exercises; assigned reading.

ASSOCIATE PROFESSOR SHANNON.

2. German Prose and Poetry (3)—Selections from Riehl, Freytag, Heine, Lessing, Goethe, Schiller, and different lyric poets; Poll's German Composition; translation from German into English, and from English into German. *Prerequisite: German* 1.

PROFESSOR CARR.

3a. HISTORY OF GERMAN LITERATURE (3)—Recitations; reading of works representative of different epochs; written reports. *Prerequisite: German 2. Omitted in* 1903-1904.

PROFESSOR CARR.

4a. GERMAN DRAMA OF THE CLASSIC PERIOD (3)—Selected works of Lessing, Goethe, and Schiller. *Prerequisite*: German 2.

PROFESSOR CARR

5a. Practice in Speaking and Writing German (2)—Vos's Materials for German Conversation. Prerequisite: German 1.

PROFESSOR CARR.

6a. MIDDLE HIGH GERMAN (2)—Prerequisite: German 3a or 4a. Omitted in 1903-1904.

PROFESSOR CARR.

Note.—German 4a, 5a and 3a, 6a will be given in alternate years.

Advanced students of German may elect one of the following two-hour courses: Gothic, Old High German, or Old Saxon. Such students are advised to elect English 5, if they have not studied Anglo-Saxon.

#### French.

1. ELEMENTARY COURSE (3)—Bevier's Grammar; Kuhns's French Reading for Beginners, supplemented by easy texts; composition and sight reading. This course is intended to enable the student to read easy French prose at sight.

ADJUNCT PROFESSOR DAVIES.

2. NINETEENTH CENTURY LITERATURE (3)—Representative works of Balzac, Coppee, Daudet, Dumas fils, Erckmann-Chatrian, Victor Hugo, Mérimée, and lyric poets; composition; reading at sight; assigned reading. *Prerequisite: French* 1.

ADJUNCT PROFESSOR DAVIES.

4. HISTORY OF FRENCH LITERATURE (3)—Recitations; reading of works representative of different epochs; written reports. Special attention will be paid to the classic period of the seventeenth century. Prerequisite: French 2. Omitted in 1903-1904.

PROFESSOR CARR.

- 5a. EIGHTEENTH CENTURY LITERATURE (3)—Selected works of Lesage, J. B. Rousseau, Montesquieu, Voltaire, J. J. Rousseau, Bernardin de St. Pierre, Diderot, D'Alembert, Buffon, Abbé Prévost, Marivaux, Beaumarchais, La Harpe, André Chénier. *Prerequisite*: French 2.

  PROFESSOR CARB.
  - 6. OLD FRENCH (2)—Omitted in 1903-1904.

PROFESSOR CARR.

## Spanish.

- 1. ELEMENTARY COURSE (3)—Ramsey's Grammar; selected texts; composition; reading at sight.

  Professor Carr.
- 2. ADVANCED COURSE (3)—Galdós, Marianela; Valdés, José; Estébanez, Un Drama Nuevo; Caballero, La Familia de Alvareda; Hills, Bardos Cubanos; Ford, Spanish Anthology; selections from Don Quixote; H. B. Clarke's History of Spanish Literature; lectures; composition; assigned reading. Prerequisite: Spanish 1. Omitted in 1903-1904.

  Professor Carr.

Note.—French 4 and 5a will be g ven in alternate years. French 6 is open only to advanced students.

#### MATHEMATICS AND ASTRONOMY.

Geo. W. Droke, Professor.
B. J. Dunn, Associate Professor.

#### Mathematics.

- 1. (a) SOLID GEOMETRY (firt term) (3)—Beman and Smith's New Plane and Solid Geometry.
- (b) Plane Trigonometry (second term) (3)—Lyman and Goddard's Trigonometry. Required of all Freshmen.
- 2. Algebra (2)—Fisher and Schwatt's Higher Algebra. Required of all Freshmen engineers, elective in other courses.
- 3. Algebra, Conic Sections (3)—Sophomore elective in the B. S. and B. A. Courses.
- 4. Determinants, Analytic Geometry (3)—Tanner and Allen's Analytic Geometry. Required of Sophomore engineers, elective in other courses.
- 5. Algebra (continuation of Course 2) Spherical Trigonometry, Calculus (2)—Required of Sophomore engineers, elective in other courses.
- 5a. Analytic Geometry (continuation of Course 3) (2)— Junior elective in the B. S. and B. A. Courses.
- 6. DIFFERENTIAL AND INTEGRAL CALCULUS (3)—Osborne's Calculus. Required of Junior engineers, elective for Juniors and Seniors in other courses.
- 7a. PLANE AND SPHERICAL TRIGONOMETRY (continuation of Course 1 b), AND THEORY OF EQUATIONS (2)—Sophomore elective.
- 8. Spherical Trigonometry, Theory of Equations, Determinants (2)—Junior and Senior elective.
- 9. Analytic Geometry of Three Dimensions, and Differential Equations (3)—Books of reference: C. Smith's and Frost's Solid Geometry, Salmon's Geometry of Three Dimensions. Senior elective.

Note.--Those who desire to make Mathematics their major subject may select any one of the following groups:

- (A) Math. 1 and 2 in the Freshman Year.Math. 4 and 5 in the Sophomore Year.Math. 6 and 8 in the Junior Year.Math. 9 in the Senior Year.
- (B) Math. 1 in the Freshman Year.
   Math. 3, or 3 and 7a in the Sophomore Year.
   Math. 5a and 6 in the Junior Year.
   Math. 9, or 8 and 9 in the Senior Year.
- (C) Math. 1 in the Freshman Year.
  Math. 3, or 3 and 7a in the Sophomore Year.
  Math. 5a in the Junior Year.
  Math. 6, or 6 and 8 in the Senior Year.

#### Astronomy.

13a. Descriptive Astronomy, Lectures and Recitations (first term) (2)

14a. Spherical Astronomy (second term) (2)—The class in Astronomy has the use of a four-inch telescope, sextant, celestial globe, and other simple instruments. The "laboratory method" of instruction is followed as far as practicable.

## HISTORY AND POLITICAL SCIENCE.

## J. H. REYNOLDS, Professor.

- 2. (a) Mediaeval History (first term) (3)—This course is designed to give the student a knowledge of the essential contributions of the ancient world to history, of the reorganization of German society upon the basis of Græco-Roman civilization, and of the rise of the modern States.
- (b) Modern History to 1795 (second term) (3)—Beginning where course (a) leaves off, the class will study the great world movements of modern times, such as the reformation, religious wars, absolutism, the struggle for constitutional government in England, and the contest for supremacy on the high seas. Should be preceded by course (a). Text-books: Schwill's Modern Europe and Matthews's French Revolution. For Freshmen.

- 10. The Nineteenth Century (1)—Era of Napoleon, the democratic movements of the century, their constitutional products, and the unification of Italy and Germany will be the subjects emphasized. Should be preceded by course 2. For Sophomores.
- 3a. (a) THE COLONIES (first term) (3)—The planting and the growth of English institutions in America; the development of the Federal idea; our breach with England; and the making of our Federal constitution. Largely a library course; charters and constitutional documents as well as the best secondary sources will be studied.
- (b) THE FEDERAL PERIOD TO 1875 (second term) (3)—The constitutional and political history of the United States will be studied from the organization of the government to the close of reconstruction, emphasizing the growth of political parties, the contest between Federal authority and states' rights, the slavery controversy, and the constitutional results of the civil war and reconstruction. Method of work the same as in course (a).
- 5a. (a) EARLY ENGLISH INSTITUTIONS (first term) (3)—The origin and growth of the more important English institutions, such as the Kingship, Parliament, Privy Council, common law courts, jury system and local government. Period covered from 450 to 1300. While the student should have Montgomery's History of England, Feildon's Constitutional History, and Colby's Select Documents, yet free use will be made of both original and secondary sources in the library.
- (b) Constitutional History of England in Modern Times (second term) (3)—After a brief survey of the Tudor period, the class will study more in detail the struggle for constitutional government in the Stuart period, the history of the cabinet, and the growth of parliamentary government. For method and text-book see course (a). Offered in 1904-1905.
- 4a. (a) AMERICAN STATE GOVERNMENTS (first term) (2)—A study of the place of the state in our Federal system, of the structure and workings of American state governments as they exist to-day, and some of the practical problems now before the states. Text-book: Fiske's Civil Government and the constitutions themselves.

- (b) Municipal Government (second term) (2)—While the government of our cities is coming to sustain a most vital relation to the public welfare, the American city is notoriously ill-governed. This course will offer an opportunity to study our experience in municipal government, the structure and working operation of typical city governments, and some special municipal problems.
- 6a. (a) National Governments (first term) (3)—A study and comparison of the structure and powers of the national governments of England, United States, France, Germany and Switzerland. Special emphasis will be given to the constitutional law of our Federal government. Text-book: Burgess's Political Science and Constitutional Law and the constitutions themselves.
- (b) International and Parliamentary Law (second term) (3)—A brief sketch of the history of International Law and a study of the principles now considered binding on civilized nations. Some three weeks will be devoted to Parliamentary Law. Textbook: Davis's Elements of International Law.

#### ECONOMICS AND SOCIOLOGY.

H. A. MILLIS, Professor.

The courses offered in this department are designed to afford such instruction as will be advantageous to those who intend to enter public life, or those callings which will bring them closely in touch with the activities of citizenship. Course 1 is required before more advanced courses in this department are taken.

- 1. PRINCIPLES OF ECONOMICS (both terms) (3)—Recitations and prescribed readings. Text-book: Bullock, Introduction to the Study of Economics
- \*2a. Industrial History of England (first term) (2)—The several stages in the industrial evolution of England will be studied, special attention being given to the Industrial Revolution and to the modern capitalistic system. Lectures, recitations, prescribed readings. Text-book: Warner, Landmarks in English Industrial History.

<sup>\*</sup>Offered in alternate years.

- \*12. Labor Problem (second term) (2)—The course will cover the modern industrial system, wage system, collective bargaining, history and main features of trade unionism, strikes, boycotts and lockouts, factory legislation, arbitration and conciliation, workingmen's insurance, profit-sharing, cooperation and socialism. Lectures prescribed readings and special reports.
- 3. Money (first part of term) (3)—The principles of Money and the history of Monetary Systems are considered.
- 4. Banking (latter part of first term) (3)—The principles of Banking and the history of Banking Systems. Lectures, recitations, reports and readings. Text-book: Dunbar, Chapters in the Theory and History of Banking.
- 8. Transportation, Its History and Problems (second term) (3)—The economic aspects of water transportation, the great lakes, canal systems, and the Mississippi; the evolution of the railroad system, railroad geography, rate-making, State versus private ownership, methods of government control, railroad finances, etc. Lectures, prescribed readings, and use of Railroad Commission Reports. Text-book: Hadley, Railroad Transportation.
- \*13. INDUSTRIAL HISTORY OF THE UNITED STATES (first term) (2)—The industrial development of the United States from colonial times will be traced, special attention being given to modern industrial processes and to present resources. Lectures, recitations, special reports, prescribed readings. Text-book: Wright, Industrial Evolution of the United States.
- \*5. Tariff History and Problems (second term) (2)—The theory of protection and free trade, the tariff history of the United States, and the tariff systems of leading countries engaging in trade with the United States will be dealt with. Text-book: Taussig, Tariff History of the United States. This will be supplemented by lectures, assigned readings, and use of public documents.
- 7. Public Finance (first term) (3)—Principles and history of taxation, management of public debts, consideration of governmental activities, etc. Text-book: Plehn, Introduction to Public Finance. Lectures, readings and use of government documents.

<sup>\*</sup>Offered in alternate years.

- 14. FINANCIAL HISTORY OF THE UNITED STATES (second term) (3)—An investigation of the expenditures, revenues, debts and financial administration of the Federal government. The tariff history, the public land policy, the United States banks, and like topics will be studied. Lectures and assigned readings.
- \*6. HISTORY OF ECONOMIC THOUGHT (first term) (2)—An examination of the development of Political Economy from the time of Adam Smith. Lectures, reports and prescribed readings. For reference: Ingram, History of Political Economy.
- \*11. Commercial Geography (second term) (2)—An investigation of the commercial resources and industries of the leading countries, of commercial routes, transportation systems, tariffs, etc. Lectures, recitations, reports, prescribed readings. Text-book: Adams, Commercial Geography.
- \*9. PRINCIPLES OF SOCIOLOGY (first term) (2)—This course considers the elements and conditions of social growth and progress. Recitations, lectures, and reading of assigned chapters in Spencer's Principles of Sociology and in Gidding's Principles of Sociology. Text-book: Fairbank's Introduction to Sociology.
- \*10. Social Pathology (second term) (2)—A study of the dependent, defective and delinquent classes, their problems and treatment. Recitations, prescribed readings, special reports, supplemented by lectures. Text-book: Henderson, Dependent, Defective and Delinquent Classes.

## CH MISTRY AND PHYSICS.

A. M. Muckenfuss, Professor. L. H. Rose, Associate Professor.

# Chemistry.

1. ELEMENTARY CHEMISTRY (3)—Class work twice a week; parallel work in the laboratory one afternoon throughout the year. Required in engineering and other scientific courses.

Professor Muckenfuss.

<sup>\*</sup>Offered in alternate years.

2a. General Inorganic Chemistry (3) or (4)—Lectures and recitations twice a week; laboratory work one or two afternoons throughout the year. Prerequisite for all the following courses in chemistry.

Professor Muckenfuss.

Students may begin the subject in either of the courses mentioned above.

3. QUALITATIVE ANALYSIS (3) or (4)—(a) Recitations twice per week, first term. (b) Laboratory work two afternoons per week for engineering students, three afternoons for scientific students, throughout the year. The object is for the student to understand the methods of separation as well as to follow them correctly. A large number of substances, both simple and complex, are analyzed.

PROFESSOR MUCKENFUSS.

4a. Organic Chemistry (4)—Lectures and recitations twice per week; laboratory work two afternoons throughout the year.

PROFESSOR MUCKENFUSS.

Courses 3 and 4a constitute the second year of chemistry. Either may be taken alone. Students who wish to select chemistry as their major are advised to complete both courses.

5. QUANTITATIVE ANALYSIS—Laboratory work 6 to 16 hours per week. Practice in the gravimetric and volumetric analysis. This is a necessary third year for those who would become chemists. It is naturally followed in the Senior year by courses 6, 11, 13, or by another year in course 5, in which some special line, such as iron and steel analysis, is pursued.

PROFESSOR MUCKENFUSS.

6. AGRICULTURAL AND FOOD ANALYSIS (4)—This course should be preceded by at least one term of courses 3 and 5.

PROFESSOR MUCKENFUSS.

7. Industrial Chemistry (3)—Three times per week throughout the year. A study of industries having chemical principles for a basis.

ASSOCIATE PROFESSOR ROSE.

8. Physical and Theoretical Chemistry (3)—The former consists chiefly of laboratory work, such as, determination of molecular weights, thermochemical work, measurement of electro-

lytic conductivity, practice with polariscope and refractometer. The latter is entirely class work. One or two terms.

ASSOCIATE PROFESSOR ROSE.

Assaying (2) or (3)—Laboratory work for one term, consisting of preparing and testing reagents, making cupels, and assaying samples of furnace and mill products.

ASSOCIATE PROFESSOR ROSE.

- 10. Toxicology (1)—Laboratory work once a week throughout the year. A working knowledge of qualitative analysis is a prerequisite.

  Professor Muckenfuss.
- 11. Gas Analysis (1)—Laboratory work once a week throughout the year. This course is practically designed for technical students.

  Professor Muckenfuss.
  - 12. METALLURGY (3)—Three times a week for one term.

ASSOCIATE PROFESSOR ROSE.

Water Analysis (3)—Laboratory work one term for civil engineering students.

PROFESSOR MUCKENFUSS.

14. Electro-chemistry (3)—Recitations twice and laboratory work once per week, second term. For Junior electrical engineering students.

Associate Professor Rose.

# Physics.

1. ELEMENTARY PHYSICS (3)—Recitations twice, and laboratory work, once per week throughout the year. Recitations are fully illustrated by experiments. Required in engineering and other scientific courses.

ASSOCIATE PROFESSOR ROSE.

2. ELECTRICITY AND MAGNETISM (3)—Lectures twice, and laboratory work, once per week throughout the year. This course is necessary, whether one would become an electrical engineer or a specialist in physics.

ASSOCIATE PROFESSOR ROSE.

3a. General Physics (3) or (4)—Lectures twice per week; prerequisite, the calculus. Optional laboratory work in heat and light twice per week throughout the year.

ASSOCIATE PROFESSOR ROSE.

### DEPARTMENT OF BIOLOGY.

F. W. PICKEL, Professor.

The courses of this department have been arranged to meet the needs of three classes of students: those who desire to become acquainted with the fundamental principles of plant and animal life; those who contemplate the study of medicine; and those wishing to go more thoroughly into the study of biological science to obtain the technical training necessary for subsequent investigation or for teaching.

- 1. General Biology (3)—This course serves as an introduction to the whole field of biological science, and should be a part of the general education of every student. Types of plants and animals will be dissected and studied in the laboratory and the essential truths of biology emphasized. One recitation and laboratory work, four hours per week throughout the year. Text-book: Parker's Lessons in Biology.
- 2. Botany (3)—In this course special attention is paid to the morphology, physiology and ecology of plants, but due attention is given, in the second term, to the systematic classification of plants, and each student is required to collect and write a technical description of a certain number of plants. The geological history of plants and the origin of cultivated plants will be briefly considered. Field work, when practicable, will form an important feature of the course. Recitations and laboratory work six hours per week throughout the year. Text-books: Barnes's Plant Life; Chapman's Flora of Southern States.
- 7 3. Botany—This course will consist of lectures, assigned readings, and laboratory work in morphology, physiology, or taxonomy. Work and hours arranged after consultation with the head of the department. *Prerequisite*: Botany 2.
- 4. Bacteriology (4)—An introduction to the subject and instruction in laboratory technique—the preparation of nutrient media, the characteristics of bacteria, the kind and effects,

isolating and keeping pure cultures, microscopical preparations, the study of bacteria found in soil, in water, and in air; study of pathogenic forms and their relation to disease. One lecture and six hours' laboratory work, first term. *Prerequisite: Chemistry* 1, *Biology* 1.

- 5. General Zoology (3)—A general course in Invertebrate and Vertebrate Morphology. Attention will be given to the fundamental facts of zoological science, and the laws of development, heredity, variation, correlation, etc. In connection with the laboratory work in the course instruction will be given to such students as desire to learn methods of preparing bird skins and mammal skins for laboratory and museum specimens. Field work, when practicable, will form an important feature of the course. One recitation and four hours' laboratory work per week throughout the year. Text-books: Hertwig's Essentials of Zoology; Kingsley's Comparative Anatomy. Reference books: McMurrich's Invertebrate Zoology; Text-book of Zoology, Parker and Haswell; Weidersheim's Comparative Anatomy of Vertebrates.
- 6. ENTOMOLOGY (4)—Lectures relating to the metamorphosis, anatomy, physiology, and habits or insects. Special importance will be given to beneficial and injurious insects, with remedies for the latter. Laboratory work will consist in the study of typical forms with the aid of the guide. This will be followed with determination of families and practical studies of life histories of insects, and with methods of collecting, breeding, preserving specimens. Two lectures and four hours' laboratory work per week. Text-books: Comstock's Laboratory Guide; Harris's Insects Injurious to Vegetation.
- 7. Mammalian Anatomy (5)—This course is offered to students intending to study medicine, but is open to any student who has completed course 1 in Biology. It includes a thorough dissection of one of the higher mammals, e. g., the dog, cat, or rabbit; a short course of instruction in histological and embryological methods of technique to acquaint the student with the principles of Histology and Embryology. Two lectures and six hours' laboratory work per week throughout the year. Reference books: Gray's Human Anatomy; Reynold's The Vertebrate Skeleton; Marshall's Embryology; Stohr's Histology.

- 8. Physiology (4)—The physiology of fcods, digestion, and nutrition; the blood, circulation, and respiratory mechanism; the excretion, especially analysis of urine; functions of brain and spinal cord; physiology of nerve and muscle. Two lectures and four hours' laboratory work a week, second term. Prerequisite: Chemistry 1; Elementary Physiology.
- 9. Nature Study (1)—A special course in Nature Study, its aim, method, etc., and systematic science teaching will be offered to students who expect to teach. One lecture per week throughout the year.

#### GEOLOGY AND MINING.\*

A. H. PURDUE, Professor.

- 1. Physiographic Geology (3)—(a) Recitations three times a week on the origin of topographic features, with special attention to the development of streams and stream features, followed by (b) a detailed study of the physiography of the United States. Textbooks: Russell's Rivers of North America and Geikie's Earth Sculpture, with collateral readings. (This course will probably not be given in 1903-1904.)
- 2. General Geology and Continental Evolution (3)—(a) Structural and Dynamic Geology. Recitations and lectures three times a week. Text: Scott's Introduction to Geology, with outside reading.
- (b) Continental Evolution. Lectures, with collateral reading, during a part of the second term, on the Evolution of the North American Continent.
- 3. Practical Geology (3)—Field and laboratory work nine hours a week throughout the year, with the construction of geologic maps and sections, topographic maps, and relief maps.
- 4. Paleontology (3)—Laboratory work six hours a week throughout the year, on determination of fossil organisms.
- 5. CRYSTALLOGRAPHY AND MINERALOGY (3)—(a) Lectures and recitations three hours a week during the first six weeks on the elements of Geometric Crystallography.

<sup>\*</sup>The course in mining will be announced, and the instructor appointed later.

- (b) Laboratory work (two hours) three times a week following course (a) and extending through the year. Determination of minerals before the blowpipe, and in the wet way. Text: Determinative Mineralogy, Brush. Required of Seniors in civil engineering.
- 6. FIELD AND SPECIAL COURSES (3)—Students electing Geology as a major will be expected to spend sufficient time in the field for the careful, independent investigation of local geological problems, and to present acceptable theses on the work done. Special courses will be arranged for those who wish to elect work in addition to what is required.
- 7. Economic Geology (3)—Lectures, with collateral reading, on the formation, modes of occurrence, uses, and geographic distribution of economic geologic products. Second term. Open to all students who have had Geology 2.

#### DEPARTMENT OF PHILOSOPHY AND PEDAGOGY.

W. S. Johnson, Professor.

- 1. Descriptive Psychology (first term) (3)—This course serves as an introduction to both philosophy and pedagogy. The course is open to all students in the collegiate department. The different functions of the mind are studied from the physiological and experimental standpoint. It is intended to make it as concrete as possible by a study of the nervous system, and by experiments to demonstrate the action and interaction between the mind and nervous tissue. Owing to its pedagogical value students are advised to take this course as early as possible in their college course. Text-books: Buell's "Essentials of Psychology," James's "Briefer Course in Psychology."
- 2. ART OF TEACHING AND SCHOOL MANAGEMENT WITH SPECIAL REFERENCE TO PRIMARY SCHOOLS (1)—This course serves as a general introduction to teaching and school management. It is open to all students of the University—both preparatory and collegiate. It is especially designed for those students who teach during the vacation, or who expect to teach for only a short time.

The course will consist entirely of lectures and round-table discussions. Students may attend these lectures without enrolling as members of the class. Text-books: Page's "Theory and Practice of Teaching," Baldwin's "Art of School Management."

- 3. Methods (2)—The methods discussed are based on psychology. The broader generalizations of the science of education are studied, and the student learns to apply the principles of psychology to the work of teaching. This is a very practical course. During the first term the "Methods of the Recitation" is studied, the "General Methods," during the second term. Students may enter the second term. Text-books: McMurry's "General Methods" and "Method of the Recitation."
- 4. HISTORY OF EDUCATION (second term) (3)—This course includes a study of the educational systems and methods of ancient, mediæval, and modern nations; lives and theories of educational reformers; growth of education in the United States and in the state of Arkansas. Text-books: Boone's "History of Education in the United States," Compayré's "History of Pedagogy," Lives of Pestalozzi and Horace Mann, Arkansas School Law.
- 5. Educational Psychology (first term) (3)—This course applies the principles of psychology to the schoolroom. It deals with the child as an educable being. It treats in minute detail the sources of interest; the characteristics of imitation, heredity, attention, memory, imagination, emotions, will, and character. Recitations, lectures, assigned readings and reports. Text-books: Dexter and Gorlic's "Psychology for the Schoolroom," Hinsdale's "Art of Study." Prerequisite: Course 1.
- 6. Child Study (second term) (3)—In this course it is intended to make a practical application of the principles studied in course 5 by studying the characteristics of children as seen in the schoolroom, at home, and on the playground. Some one child is to be studied, and a thesis is to be presented on these observations. Lectures, assigned readings, reports and round-table discussions. No special text. Topics will be assigned and references made to pedagogical library. Prerequisite: Course 5.
- 7. School Administration and Supervision (first term) (2)—This course discusses matters of practical school organization and management, as observed in cities, towns and country districts.

Such subjects are discussed as school revenues and expenditures, school sanitation and decoration, course of study, duties of super-intendent and teachers in relation to school and community, philosophy of government, etc. Text-books: King's "School Interests and Duties," Spencer's "Education," Report of Committee of Fifteen, School Sanitation and Decoration. *Prerequisite*: Course 3.

- 8. Primary Methods (second term) (2)—This course consists of lectures and round-table discussions on methods of teaching the common school branches. It is intended to suggest practical methods of presenting these subjects to children. Plans for teaching some topic in each of the common school branches will be required. Practice teaching will also be required. Text-books: McMurry's "Special Methods in Geography," etc.; Roark's "Methods of Education." Prerequisite: Course 3.
- 9. Physiological and Experimental Psychology (2)—A general course illustrated by physiological and experimental demonstrations. One period will be given to discussions and recitation. The other period will consist of two hours' laboratory work in experimentation. The giving of this course will depend on whether or not the psychological laboratory is equipped by the opening of the first term of 1903-1904. Text-books: Ladd's "Outlines of Physiological Psychology," Scripture's "New Psychology."
- 10. Abnormal Psychology (1)—This course is designed to supplement course 1 and to discuss especially the physiological conditions and mental phenomena of sleep, dreams, hypnotism, somnambulism, sanity, insanity, illusions, hallucinations, mind-reading, etc. This, as well as course 1, will be especially valuable to those students who expect to study law or medicine. It is intended to throw light on many of the peculiarities of mental life as exhibited in mankind. Lectures, discussions, and recitations. Text-books: Moll's "Hypnotism," M. de Manacéine's "Sleep," Parish's "Hallucinations and Illusions," Lombroso's "The Man of Genius." No prerequisite (though desirable to be accompanied by, or preceded by course 1).
- 11. Logic (second term) (1)—This and course 12 are combined and should follow course 1. Text-book: Jevons-Hill. Reference books: Hyslop, Mills, Bain, Hamilton. Prerequisite: Course 1.

- 12. ELEMENTS OF ETHICS (second term) (2)—Comparative Ethics. The bearing on the moral standing of the theories of Evolution, Sociology, Biology, Economics and Political Economy, as applied to real life. Text-books: Mackenzie and Seth. Reference books: Martineau, Jenet. Prerequisite: Course 1.
- 13. Introduction to Philosophy (2)—This course is designed to present in an elementary way the principal philosophical problems. It may properly be taken by all who desire an acquaintance with philosophy as a means of culture.

Emphasis will be laid upon the philosophy of life and of conduct in connection with the discussion of problems in Ethics, Aesthetics and the Philosophy of Religion. The problems will also be studied from the historical standpoint, which will involve the study of some of the theories of philosophical writers. Text-books: Paulsen's "Introduction to Philosophy," Bowne's "Theory of Thought and Knowledge," Knight's "Philosophy of the Beautiful, Kulpe's "History of Philosophy." Prerequisite: Course 1.

### NORMAL COURSE.

### Certificate of Licentiate of Instruction.

The certificate of Licentiate of Instruction (L. I.) has been established by the board of trustees as a stamp of one's knowledge of educational principles and proficiency in the art of teaching.

The certificate of Licentiate of Instruction will be granted (1) to those who complete the prescribed course for the state certificate, (2) to those candidates for the B. A. and B. S. degrees who elect their major in the department of philosophy and pedagogy, (3) to those who receive eight hours credit in this department, subject to the approval of the professor in charge of this department.

The department of pedagogy was organized by the board of trustees to provide a proper course of study for the teachers of Arkansas.

# Its objects are:

- To increase skill and efficiency in organizations, methods, management, and teaching our rural, or ungraded schools.
- 2. To qualify teachers for the higher grades of work embodied in the studies necessary for state license.
- To prepare teachers for professional skill in supervision, either as principals or superintendents.
- To give increased scope and development to our secondary schools.
- 5. To elevate and maintain in the state a professional spirit and a higher scholastic standard.

The graduates of the University are filling acceptably many of the best educational positions in the state and the demand now is greater than the supply. The need of professionally trained teachers is actively increasing, and the facilities heretofore afforded at the University have been enlarged so as to meet the necessity. The normal department has been well equipped with needful devices, apparatus and library, and the choicest educational literature and reading is daily supplied. The problems of the day are subjects in the regular work of lectures, discussions, and theses. Besides the need of more thorough efficiency in the teaching force in common schools, there is a strenuous demand for superior skill and power in our graded school. The energy of expansion in educational interests, consequent upon the growth of population, wealth and revenues, is manifested by the increase in the number of special school districts and high schools. It is further noticed in improved buildings, equipments and appointments. This higher expression of progressive public sentiment insures the demand for professionally trained teachers—those who understand teaching as a science and an art, and who know the history of education and something of its problems and developments. It is not a credit to the state that such efficiency and power have been heretofore sought beyond our borders.

Granting the vast wealth of equipment in normal schools in the eastern states and the acuteness of their professional training, yet those who study pedagogy within the political, civil and sociological environments of their own state are prepared to work more effectively for the pupil and for the commonwealth than those educated elsewhere and

who are strangers to the problems and conditions that confront us in Arkansas.

# Requirements for State Certificate.

\*Section 6974 of the Revised Statutes of the State is as follows: "The state superintendent of public instruction shall have power to grant state certificates, which shall be valid for life, unless revoked, to any person in the state who shall pass a thorough examination in all those branches required for granting county certificates, and also in algebra and geometry, physics, rhetoric, mental philosophy, history, Latin, the Constitution of the United States, and of the state of Arkansas, natural history and the theory and art of teaching."

\*The Superintendent of Public Instruction puts the following construction on

"State licenses are not granted to inexperienced teachers. Applicants for the same must present satisfactory evidence of having taught successfully at least twenty months.

"State licenses are granted, under the law, only on approved examinations,

conducted by the State Superintendent.

"While the law is silent as to the scope of the examination, naming the subjects only, the following outline will give an idea as to the requirements under the present administration: In algebra, natural history (botany, geology zoology), physics, and general history, the examination will be on such matter as is comprehended in the average high school text-books on these subjects.

"Latin-Grammar and composition; first four books of Caesar; first two books of Virgil; first two orations of Cicero against Catiline, and his essay De Senectuteor equivalent readings.

"Geometry-Plane geometry, and first two books of solid geometry, including exercises.

"Rhetoric-With special reference to the essentials of English composition.

"Constitution of the United States and of Arkansas-Embracing a study of the origin, subject-matter, and civic relations under the same.

"Theory and Art of Teaching, Mental Philosophy-As discussed in works on these

subjects.

"Holders of first-grade certificates may not be examined in the common school branches. An average of 80 per cent will be required on all subjects. Below 70 per cent on any subject will be considered a failure thereon."

To meet the provisions of this law, a four years' course has been provided, which includes all the branches on which one is examined for the state certificate, which also leads to the certificate of L. I. (Licentiate of Instruction). As given in the scheme of studies below, the first two years may be done in the high schools or in the preparatory department of the university. The completion of the first two years also entitles one to admission to the Freshman class in the B. A. and B. S. courses.

The hours completed during the third and fourth years are credited on the courses leading to the degrees of B. A. and B. S.

## Course Required for State Certificate.

FIRST YEAR.	pe	reek
Arithmetic		 2
Algebra		
English		
History of United States		
Latin		 4
SECOND YEAR.		
Algebra		 2
Plane Geometry		
English		
General History		
Latin	٠.	 . 4
THIRD YEAR.		
English, course 1		 
Latin, course 1		
Mathematics, course 1 (Solid Geometry)		
Biology, course 1		
Pedagogy, courses 1, 3, 4		

	FOURTH YEAR.	Hours per week.
English, course 2		3
History, course 2		2
Physics, course 1		3
Pedagogy, courses 5, 6, 7, 8		5
Singing and Drawing		2

#### MECHANICAL ENGINEERING.

- B. N. Wilson, Acting Professor and Superintendent of Mechanic Arts.
- J. E. Beavers, Acting Adjunct Professor and Assistant Superintendent of Mechanic Arts.
- W. A. HARDING, Assistant Superintendent of Mechanic Arts.

Two courses are offered, a four-year course leading to the degree of B. M. E., and a short course of two or three years, depending on the preparation of the student.

While the major part of a course in mechanical engineering necessarily consists of scientific and technical studies, the four years' course provides for instruction in English and the modern languages, and offers electives that may be taken in other than technical subjects.

Besides the mathematical and scientific studies which constitute the necessary preparation for the study of the engineering branches, instruction is given in mechanics, machine design, theory of steam and gas engines, etc. Special attention is given to the practical application of the truths and theories taught in the class room, a large part of the time being devoted to shop work, drawing and laboratory practice.

Sufficient instruction is given in the theory and use of electrical machinery to enable the student to use it intelligently. In the second term of the senior year the student is offered an elective in the branch of mechanical engineering in which he wishes to specialize.

- 1. Shop Work (hours as assigned)—(a) Woodworking. Principles of carpentry and joinery; exercises in wood turning. (b) Founding. Green sand molding; melting and pouring brass and iron. (c) Forging. Management of fire; drawing and welding; riveting and tempering; case hardening and annealing. (d) Patternmaking. Practice in making patterns; care and use of woodworking machinery. (e) Ironworking. Chipping, filing, turning, planing, drilling, grinding; erection of machinery. (f) Advanced work in any of the above courses.
- 2. MECHANICAL DRAWING (2) or (4)—Geometrical drawing; copying machine drawings; working drawings from machine parts; tracing; blue printing. One year, four hours per week. Eight hours per week for short course students.
- 3. Machine Design (2) and (3)—Kinematics of machinery; design of gear teeth, cams, link motions, etc. Two hours' recitation per week, first term. One hour's recitation and four hours' drawing per week, second term. Text-book: Machine Design, Smith.
- 4. MECHANICS AND HYDRAULICS (4)—Statics and dynamics; strength of materials; hydraulics. Four recitations per week for one year. Text-book: Mechanics of Materials and Hydraulics, Merriman.
- 4a. ELEMENTARY MECHANICS (3)—An elementary course in mechanics and hydraulics.
- \*5. Steam Machinery (3)—Elementary thermodynamics; comparison of types of steam engines, boilers, pumps, etc., valve gears. Text-books: Steam Engine, Ewing; Valve Gears, Halsey. Three recitations per week for one year.
- 5a. Steam Engines and Boilers (3)—Elementary theory of steam engines and boilers—care and management of same; valve gears. Three hours per week one year.

<sup>\*</sup>Courses 5 and 5a may be taken for one term.

- 6. EXPERIMENTAL ENGINEERING (2)—Calibration of engineering instruments, indicators, steam gauges, planimeters, nozzles, weirs, etc.; tests of the materials of construction in tension, torsion, compression, and bending; complete engine and boiler trials. Textbook: Experimental Engineering, Carpenter. Four hours' laboratory work per week.
- 7. Steam and Gas Engines (4)—Theory of steam and gas engines; problems in steam engine and boiler design. One recitation, three periods of drawing.
- 8. EXPERIMENTAL ENGINEERING (2)—Advanced work in Engineering laboratory; special investigations.
- HYDRAULIC MACHINERY (2)—A study of the design, construction and operation of water wheels and pumping machinery. Two recitations per week.
- 10. METHODS OF ICE MAKING; COLD STORAGE (2)—Ice making machinery. Two hours per week for one term.
- 11. Heating and Ventilating (3)—Principles of ventilation; the different systems of heating, by steam, hot water, and air; specification. Three hours per week for one term.
- 12. Steam Engineering (4)—Mechanical engineering of power plants; selections of machinery for the equipment of power stations; plans and specifications. One lecture and six hours' drawing per week, second term.
- 13. MACHINERY AND MILL WORK (4)—Discussions of the different methods of distributing power in mill work; considerations controlling the design of the power plant; specifications. One hour lecture and six hours' drawing per week, second term.
- 14. RAILROAD ENGINEERING (4)—Design and construction of locomotives; repairs for rolling stock; discussion of the problems relating to the mechanical engineering of railroads. One hour lecture and six hours' drawing per week, second term.

The department reserves the right to withdraw any course not elected by four or more students.

# Course in Mechanical Engineering for the Degree of B. M. E.

FRESHMAN YEAR.

Hours per week.

Mathematics 1 and 2
English 1
Physics 1
Mechanical Drawing, M. E. 2.
Shop Work
bhop work
SOPHOMORE YEAR,
Mathematics 4 and 5 5
Chemistry 1 3
C. E. I, first term, and E. E. 2, second term
Physics 2 or a language 3
Shop Work 3
JUNIOR YEAR,
Mathematics 6
M. E. 6, Mechanical Laboratory 2
M. E. 4, Mechanics
M. E. 3, and Shop Work 5
Elective 3
SENIOR YEAR,
M. E. 5, Steam Machinery 3
M. E. 8, Mechanical Laboratory
M. E. 9, Hydraulic Machinery, first term
E. E. 12, Electrical Machinery
E. E. 5, Electrical Laboratory.
Elective
Thesis, second term.
All elections to be made subject to approval of the professor of
mechanical engineering.

# Mechanic Arts Course.

This course is designed to meet the wants of two classes of students:

First. Those who are not able to spend the time required for the completion of the four years' course.

Second. Those who lack the necessary preparation for admission to collegiate classes, and do not wish to become candidates for a degree.

Special attention is given to instruction in shop work and drawing, sufficient time being given to the former to enable a student to become familiar with all its branches, and acquire proficiency in some chosen one. The time spent in the drawing room will enable the student to make and understand the machine drawing.

In the last year the technical instruction is designed to give such an elementary knowledge of mechanics, machine design, and steam machinery, as will enable the student to use and care for machinery intelligently. No diploma is awarded, but a certificate of proficiency will be given on the completion of the course.

# Courses Required for Certificate.

FIRST YEAR.	Hours per week.
Mathematics, second year preparatory	
English, first or second year preparatory	4
Shop Work	6
SECOND YEAR.	
M. E. 4 a, Mechanics and Hydraulics	3
Physics 1	3
M. E. 2, Mechanical Drawing	4
Shop Work	0

THIRD YEAR.			wee	
M. E. 3 and 5, Machine Design and Steam Machinery		 		5
M. E. 6, Mechanical Laboratory				2
E. E. 12, Electrical Machinery		 		3
E. E. 5, Electrical Laboratory				2
Elective	2VS	 		3

#### CIVIL ENGINEERING.

- J. J. KNOCH, Professor.
- G. STUBBLEFIELD, Instructor.

The design of this department is to furnish a course of theoretical instruction, accompanied by illustrations and as much of engineering practice as can well be taught in schools. This course will give the student a knowledge of the fundamental principles required to enter intelligently upon the various branches of engineering belonging to this profession.

The special technical studies, which are offered in this course, may be grouped under the heads of surveying, applied mechanics, road and railroad engineering, hydraulic engineering, bridge engineering, and sanitary engineering.

Instruction. The work in surveying extends over three years. It embraces land surveying, leveling and United States public land surveys during the sophomore year; topography, railroad reconnoissance and location during the junior year; triangulation and geodesy during the senior year. Much time is devoted to practice in the field and drafting room, this work being carried on parallel with the classroom work. Each year a party of engineering students go into camp one week for practice in surveying and locating railway lines.

- 1. Descriptive Geometry (2)—Recitation and practice, first term. Text-book: Church's Descriptive Geometry.
- 1a. Drawing (2)—Selection and care of instruments. Drawing geometrical figures, conventional representation of materials, copying and tracing working drawings; and drawing from models. Two afternoons throughout the year.
- 2. Surveying (with 3) (3)—First, and part of second, term. Care, use, and adjustment of instruments; use of chain, tape, compass, transit, solar attachment, level, sextant, and plane table; land surveying, leveling, contouring, laws, and instructions relating to surveys of the public domain. Text-book: Raymond's.
- 3. FIELD PRACTICE—Exercises in land, city, and topographical surveying. Two afternoons throughout the year.
- 4. Highways (1)—One hour per week, second term. The location, construction, and maintenance of common, Macadam, and Telford roads; brick, stone, wood, and asphalt pavements for city streets. Text-book: Spaulding's Roads, Streets, and Pavements.
- 5. RAILROAD ENGINEERING (2)—Two hours per week throughout the year. Preliminary surveys and location; transition curves, yards, and turnouts; estimates of earthwork and material used in construction; the economics of railroad location and management. Text-books: Searle's Field Engineering, and Crandall's Transition Curve and Earthwork Computations, first term; Wellington's Economic Theory of Railway Location, second term.
- 6. FIELD PRACTICE (2)—Location of curves, turnouts, and Y's; measurement of embankments and cuts, and computation of volumes. Four hours a week throughout the year.
- 7. Railroad Survey—One week, twelve hours per day. Actual field practice in reconnaisance, preliminary survey, and location.
- 8. Drawing (2)—Lettering titles for maps and drawings. Pen and colored topography. Four hours a week throughout the year.
- 8a. Drawing (2)—Lectures and practice two afternoons a week throughout the year. Shades, shadows, and perspective. Topographical and railroad maps from actual surveys; masonry dams, structural details, and working drawings for designs.

- 9. Masonry Construction (2)—Two hours per week, first term. Use of lime, and hydraulic cement mortars; stone and brick masonry foundations; foundations in soft materials on land and under water; cofferdams, cribs, and caissons. Text-book: Baker's Masonry Construction.
- 10. Roofs and Bridges (3)—Four hours per week, first term; three hours, second term. Theory of computation of stresses by both analytical and graphic methods; full computations, designs, and bills of material for a roof truss and railroad bridge. Textbooks: Merriman and Jacoby's Roofs and Bridges, Parts I, II, and III.
- 11. Sanitary Engineering (2)—Two hours per week, first term. Calculation and special details of construction of sewers, separate and combined systems of sewerage; purification of sewerage; municipal and domestic sanitation. Text-book: Baumeister's Cleaning and Sewerage of Cities.
- 12. Technical Drawing (2)—Lectures and practice, four hours per week throughout the year. Right and oblique arches; drawings for computations of course 10.
- 13. Waterworks Engineering (3)—Three hours per week, second term. Study of systems of water supply; collection, purification, and distribution of water; location of waterworks, with details of estimate of cost, turbines and pumping engines. Textbook: Folwell's Water Supply Engineering.
- 14. Engineering Laboratory (2)—Two hours per week, first term. Test of strength and other properties of materials of construction; tensile and crushing tests of brick, stone, and cement; flow of water through pipes, elbows, valves, and measurement by means of weirs.
- 15. FIELD PRACTICE (2)—Two hours per week, first and second terms. Topographical survey, triangulation, precise leveling, and practical astronomy.
- 16. Contracts and Specifications (3)—Elective for Seniors in engineering. Lectures and recitations three times per week. Text-books: Johnson's Contracts and Specifications; Wait's Engineering and Architectural Jurisprudence.

Hours

# Course in Civil Engineering for Degree of B. C. E.

	FRESHMAN YEAR.	per weel	k.
M	athematics 1, 2		5
C	hemistry 1		3
E	nglish 1		3
C	E. 8, Lettering		2
C	E. 1a, Drawing		2
	SOPHOMORE YEAR,		
M	athematics 4, 5		5
C	. E. 2, 3, Surveying		3
E	nglish 2, French, German, or Spanish 1		3
	hysics 1		3
	. E. 1, Descriptive Geometry, first term		2
	E. 4, Highway Construction, second term		1
	renitectural Drawing, second term		1
	to the state of th		
	JUNIOR YEAR.		
M	athematics 6, Calculus		3
	E. 4, Mechanics and Hydraulics		4
6	E. 5, Railroad Engineering		2
100	E. 6, Field Practice.		2
	E. 8a, Technical Drawing.		2
	Elective		4
	SENIOR YEAR,		
C	E. 15, Field Practice.		1
	E. 14, Engineering Laboratory, first term		1
	E. 11, Sanitary Engineering, first term		2
100	E. 12, Technical Drawing.		2
	E. 13, Waterworks Engineering, second term		3
100	E. 9, Masonry Construction, first term		2
	E. 10, Roofs and Bridges		
	eology 5, Blowpipe Analysis, second term		2
	Elective		3
	hesis		
-			
	*Electives can only be taken on approval of the professor		

<sup>\*</sup>Electives can only be taken on approval of the professor.

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### ELECTRICAL ENGINEERING.

W. N. Gladson, Professor.
W. A. Treadway, Instructor.

Two courses of instruction are offered. The four years course is intended to afford a good general education, and at the same time to ground the student so thoroughly in the principles of electrical engineering as to furnish a good foundation for the profession.

Theoretical and applied electricity and the mechanics of engineering are naturally the leading subjects.

Theory is amply treated and tested by experiments in well equipped laboratories, thus affording the student a degree of facility in the use of instruments and machines which is acquired only by continued practice. As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of special study. The subject of such study must lie within the field of electrical engineering. It must be announced not later than the beginning of the second term of the senior year, and be approved by the professor in charge. The completed thesis must be submitted not later than two weeks before commencement day, and one copy must be deposited in the library as the property of the University.

The short course, of two years, is designed for students lacking time and preparation for the full course, and is intended especially for those who have had some practical experience in engineering. The work is more elementary than in the long course, embracing only the necessary mathematics, which, with electrical engineering and laboratory work, gives the student sufficient theory, supplemented by practice in the shortest possible time.

This course prepares students for practical work, such as constructing, operating, superintending or managing lighting, power or manufacturing plants. It does not lead to a degree, but a suitable certificate will be given on completion of the work

1. ELECTRICAL ENGINEERING (5)—Recitation, lectures, and practice five times a week throughout the year. Installation and operation of electrical machinery; Underwriters' rules; calculations; estimates; specifications, and practical work. Text-book: Management of Dynamos and Motors, by Croker and Wheeler, and Electricity and Magnetism, by Thompson.

PROFESSOR GLADSON.
INSTRUCTOR TREADWAY.

2. ELECTRICAL MEASUREMENTS (2)—Recitations and practice twice a week, second term. Text-book: Electrical Measurements, by Carhart and Patterson.

PROFESSOR GLADSON.

3. Technical Drawing (2)—Lectures and practice two afternoons a week throughout the year. Working drawings or electrical apparatus; wiring plans designed by student.

INSTRUCTOR TREADWAY.

3a. Drawing (2)—Use and care of instruments; copying of mechanical drawings and wiring plans. Drawing of machine parts.

Instructor Treadway.

4. TECHNICAL DRAWING (2)—Lectures and practice four hours a week throughout the year; an extension of course 3, and must be preceded by it. Drawings of circuit and machine, electrical calculations, and mechanical designs of electrical machinery; complete power plants designed by student.

PROFESSOR GLADSON.

5. ELECTRICAL LABORATORY (2)—One afternoon a week throughout the year. An extended course in magnetic and electrical measurements; current, electro-motive force, and resistance; use and calibration of instruments, voltmeters, and potentiometers; exploration of magnetic fields; dynamo work begun.

INSTRUCTOR TREADWAY.

6. ELECTRICAL LABORATORY (4)—One afternoon a week throughout the year. This is an extension of course 5, and must be preceded by it. A full experimental course in operating and testing direct and alternate current machines; Photometry transmission, storage, and transformation of electric energy. Special courses given suited to the preparation and object of the student.

PROFESSOR GLADSON.

7. DYNAMO-ELECTRIC MACHINERY (3)—Recitations three hours a week throughout the year. Confined chiefly to direct current apparatus, including types of motors, generators, and transformers; design, calculations, construction, testing, and operating. Textbook: Thompson's Dynamo Electric Machinery.

PROFESSOR GLADSON.

- 8. Theory of Alternate Currents (3)—Recitations three times a week, first term. Text-book: Sheldon's Alternate Currents; Machines.

  Professor Gladson.
- 9. POLYPHASE ELECTRIC CURRENTS (3)—Recitations and lectures three times a week, second term. Text-book: Thompson.

PROFESSOR GLADSON.

- 10. ELECTRIC RAILWAYS (2)—Recitations and lectures twice a week, second term. Text-book:

  Professor Gladson.
- 11. TELEPHONY AND TELEGRAPHY (2)—Lectures and recitations twice a week throughout the yeor. Text-books: Preece's Telephone and a manual of Telegraphy.

  Professor Gladson,
- 12. ELECTRICAL MACHINERY (3)—Recitations three times a week on Direct and Alternate Current Dynamos and Motors; their application to light, power, railway mining, and manufacturing. Textbook: Dynamo Electric Machinery by S. Sheldon.

INSTRUCTOR TREADWAY.

# Course in Electrical Engineering for the Degree of B E E.

FRESHMAN YEAR.	Hours per week.
Mathematics 1, 2 (Solid Geometry, Trigonometry, Algebra	) 5
English 1 (English Composition)	3
Physics 1 (General Physics)	3
E. E. 3a (Drawing)	2
M. E. 1d, b (Shop Work)	2

	SOPHOMORE YEAR. Four per wee	
M	athematics 4, 5 (Determinants, Analytic Geometry, Spherical	
	Trigonometry, and Calculus)	5
Cl	nemistry 1 (General Inorganic Chemistry)	3
C.	E. 1 (Descriptive Geometry; and E. E. 2, Electrical Measure-	
	ments)	2
Pl	nysics 2 (Electricity and Magnetism)	3
M	E. 1c, e (Shop Work)	2
M	JUNIOR YEAR. athematics 6 (Calculus)	3
E.	rench 1, German 1, Spanish 1, or English 2	3
F	E. 7 (Dynamo Electric Machinery)	3
1 5	E. I (Dynamo Electric Machinery)	2
i 5	E. 5 (Electrical Laboratory)	
M.	E. 3 (Technical Drawing)	2
141	E. 4 (Mechanics and Hydraulics)	4
	SENIOR YEAR.	
M.	E. 5 (Steam Machinery-first term and Chemistry 14. Elec-	
	tro-Chemistry, second term)	3
E.	E. 8 (Alternate Current Theory, and E. E. 9, Polyphase	
	Electric Currents)	3
E.	E. 6 (Electrical Laboratory)	2
	E. 4. (Technical Drawing)	2
E.	E. 11 (Telegraphy and Telephony)	2
M.	E. 6 (Mechanical Laboratory, first term; and E. E. 10, Elec-	
	tric Railways, second term)	2
El	ective	3
Th	esis	
	*Short Course in Electrical Engineering.	
	FIRST YEAR. Hours	
E.	E. 1 (Electrical Engineering)	
		2
	E. 4a (Elementary Mechanics)	3
	E. 1d, b (Shop Work)	3
	athematics (First Preparatory Algebra)	3

\*Candidates for this course should be at least 16 years old and have a fair knowledge of the common school branches, especially Arithmetic.

UNIVERSITY OF ARKANSAS LIBRARY

SECOND YEAR.	1	pe	r	week
E. E. 12 (Electrical Machinery)				. 8
E. E. 3 (Technical Drawing)				. 2
E. E. 11 (Telephony and Telegraphy)				. 2
E. E. 5 (Electrical Laboratory)				. 2
M. E. 5a (Steam Engines and Boilers)				. 3
M. E. 1c, e (Shop Work)				. 3

## AGRICULTURE AND HORTICULTURE.

The course in agriculture or in horticulture leads to the degree of Bachelor of Science. The entrance and graduation requirements with agriculture or horticulture as a major will be found under the general requirements for entrance and graduation on pages 59 and 60. Students are advised to decide upon their major subjects as early in their college career as possible. This will unify their course and give purpose to all their university work.

Agriculture and horticulture are comprehensive-composite subjects, the principles upon which they are based being derived from a number of sciences. The course in either subject is a university course, with special attention to the sciences as they relate to agriculture or horticulture as a major subject. While in a sense a specialist, the specialist in agriculture or horticulture is less a specialist than in almost any other field. The full course of study, while ultimately practical, is intended to afford a training as broad as any other course, and equal in educational value.

Nearly everyone at some time or other in life has to do with lands and the planting of trees or gardens, if not for money considerations then for pleasure. Some of the subjects offered in agriculture and horticulture are therefore of value to students in other departments as practical parts of a liberal education. Some of the studies may be included by such students as electives.

The course of instruction aims throughout to give the student a grasp of fundamental principles, and at the same time furnish opportunity for observing their practical application to the extent of rendering him independent of mere arbitrary rules of practice. The student is encouraged to discover, plan, and execute for himself, and he is aided in this by his association with specialists in the lines which he is pursuing, and by constant opportunity to observe the farm, orchard, and garden work of the national agricultural experiment station connected with the University.

In addition to the theoretical work the student is expected to acquire a degree of practical skill—to become familiar with the best methods, and the use and care of implements and machinery.

# Agriculture.

# C. L. NEWMAN, Professor.

- 1. (a) Soms—Their origin, classification, properties and relation to animal and plant production; drainage; irrigation; tillage. Three hours per week, first term.
- (b) FARM CROPS—Manures and fertilizers; grain crops; hay and pasture crops; root crops; fiber and miscellaneous crops. Three hours per week, second term. Required of Freshmen in the Agricultural Course.
- 2. (a) FARM BUILDING, MACHINERY AND TOOLS—Location, construction, and management of stables, barns, dairies, silos, piggeries, sheepfolds, poultry houses, roads, and fences. Farm machinery and tools, water supply. Two hours per week, first term.

- (b) FARM ANIMALS—General discussions of the various animals usually on a farm, their breeding, feeding, care, and the production of feeds for the various classes. Two hours per week, second term Required of Sophomores in the Agricultural Course.
- 3. (a) Rural Economy—General farm management; labor marketing; transportation. Two hours per week, first term.
- (b) EXPERIMENTS—Records and discussions of experiments conducted by the experiment station. Two hours per week, second term. Required of Juniors in the Agricultural Course.
- 4. Special Farming—(a) Live stock in general; (b) cattle; (c) swine; (d) sheep and goats; (e) poultry; (f) animal breeding; (g) animal feeding. Each subject two hours per week, first term Four hours required of Seniors.
- (h) Grain crops; (i) cotton; (j) root crops; (k) forage, soiling crops and the silo; (l) hay, pasture, and green manuring crops; (m) plant breeding; (n) fertilizers and their uses. Each subject two hours per week, second term. Four hours required of Seniors

#### Horticulture.

#### ERNEST WALKER, Professor.

- 1. (a) Physiology of Plants—A study of the subject from the horticultural standpoint. Fall term, three hours.
- (b) The Principles of Plant Breeding—Environment, variation, heredity, cross-pollination, selection, improved varieties evolution of fruits and vegetables. Spring term, three hours Required of Freshmen in the Horticultural Course.
- 2. (a) Horticultural Structures and Conveniences—Hotbeds, cold frames, pits, greenhouses, materials, construction, greenhouse heating, ventilation, management, implements. Fall term two hours.
- (b) Propagation of Plants—The various methods by which plants are multiplied, spores, seed, cuttings, budding, grafting transplanting. Spring term, two hours. Required of Sophomores in the Horticultural Course.

- 3. (a) FRUIT CULTURE—Orcharding, viticulture, small fruits with reference to kinds and varieties best adapted to the state, cultivation, marketing, including insects, diseases, spraying and other methods of control. Fall term, two hours.
- (b) Vegetable Gardening—Studies in the growing of the principal vegetables adapted to the state, for home use and market; insects, diseases. Spring term, two hours. Required of Juniors in the Horticultural Course.
- 4. Special Work and Practice—(a) Handicraft. Throughout the year, two hours. (b) \*Horticultural literature. Fall term, one hour. (c) Decorative gardening. Spring term, two hours. (d) \*Forcing of vegetables and flowers. Fall term, two hours. (e) \*Forestry. Fall term, two hours. (f) \*Special studies and reports. Spring term, one hour. At least four hours required of Seniors.

#### MILITARY SCIENCE AND TACTICS.

CAPTAIN LANNING PARSONS, U. S. Army.

- 1. PRACTICAL WORK (3)—Three hours per week. In school of the soldier, squad, platoon, company, and battalion, close and extended order; ceremonies of guard mounting, dress parade, inspection, and review; camping, guard duty, target practice, laying out field works, and signaling. In this work the cadet officers act as instructors, thus putting into practice the knowledge gained in previous years.
- 2. RECITATIONS AND LECTURES (1)—One hour per week. Infantry Drill Regulations (U. S. Army, Part 1). Manual Guard Duty (U. S. Army).
- 3. RECITATIONS AND LECTURES (1)—One hour per week. Infantry Drill Regulations (U. S. Army, Part 2). Small Arms Firing Regulations (Blunt).
- 4. RECITATIONS AND LECTURES (1)—One hour per week. Military Field Engineering (Beach). Military Signaling (U. S. Army Signal Code).
- 5. RECITATIONS AND LECTURES (1)—One hour per week. Service of Security and Information (Wagner). Military Law (Winthrop).

<sup>\*</sup>Courses marked \* open only to third and fourth year collegiate students.

#### DEPARTMENT OF MUSIC.

PAUL SCHMOLCK, Director.

# Plan and Purpose.

The fundamental idea of the management has been to make the department of music complete and thorough in every respect and to advance the pupils rapidly, yet carefully. In other words, the standard of efficiency in the music department of the University of Arkansas must be so high that a certificate of study and ability granted here will possess a value that will be recognized far and wide; that pupils will choose to study here in preference to going to the greater cities.

## Recitals.

We would call especial attention to the recitals of both students and faculty, of which a number are given each year, and which have won a reputation for artistic excellence. The advantage derived from these cannot be over-estimated.

At the pupil's recitals, which are given at regular intervals, all students are privileged and expected to appear as their talents and advancement may warrant. Not only does this offer them a greater incentive to put forth their best efforts, but it helps them to overcome any nervousness they may feel when appearing before the public, which often mars the performance of students who have not the opportunity of performing frequently before an audience.

# Chorus Work.

A large chorus has been organized to which all students are admitted free. Oratorios, cantatas, and part songs by

the best composers are studied here, which are performed in recitals and concerts during the season and especially at commencement.

## Orchestra.

Students of violin and other orchestral instruments will, as soon as possible, be admitted to membership in the University orchestra, which takes part in all recitals, and also in all concerts in connection with the Choral Union. This practice is a decided advantage to the student as well as a source of pleasure.

# Piano.

Modern science has accomplished in the study of the arm, knuckles, wrist, and fingers for touch and technique, much in advance of older methods. By proper attention to the details at the outset much disappointment and misdirected effort can be spared. The great value of this training of the wrist, fingers, and arms has been shown in the playing of the greatest pianists, Liszt, Von Buelow, Paderewski, and others, and greater strength for the fingers can thereby be developed, also suppleness and elasticity of the wrist and forearm. The course of study consists of technical exercises followed by Studies of Bertini, Koehler, Heller, Loeschhorn, Czerny, Cramer, Clementi, Moscheles, Kullak, Chopin, Rubinstein, Liszt, etc., inventions, suites, well tempered Charichord of Bach, Sonatas of Mozart, Haydn, Beethoven, also compositions by Weber, Mendelssohn, Schumann, Chopin, Liszt, Rubinstein, Brahms, etc.

# Piano Practice.

At very moderate expense pupils can arrange to do their daily practicing at the University building, in case this should prove desirable.

# Violin and Other Stringed Instruments.

MISS CLARA SCHRADER.

The violin is by many considered the most difficult of instruments and requires careful and conscientious study. Much depends upon the beginning. Often a pupil begins study with an inexperienced teacher, or one who does not concentrate his attention on this one most difficult instrument, and consequently falls into bad habits of position, bowing, or technique that make advancement difficult, and are in many cases almost impossible to overcome. Special attention is given to the above in addition to the phrasing, etc. The pupil is taken from the beginning and carefully brought through the most difficult phases of the violin. In addition to his exercises he is, as soon as possible, given pieces within his capacity. The course of study includes the following: Hohman's Practical Method, Books I-V, F. Wohlfarth, op. 45, Books 1, 2; op. 74, Book 1; G. Wichtel, op. 20; Studies of Mechanic and Expression, Mazas, op. 38, 12 Duos Blumenthal, op. 68, 24 Etudes; Rud Kreutzer, 42 Studies or Caprices, Henry Schradick's School of Violin Technics; Pieces by Vieuxtemps, Dancla, DeBeriot, H. Schroeder, Weiss, Tartini, Blumenstengel, Behr, Brahms, Dussek, Durand, Ernst, and others.

Instruction on the guitar includes the following courses: Arling Shaeffer's "Elite" Method, Winner's, Weisshaupt's or Carcassi's Methods; Pieces by Sousa, Arnold, Weissenberg, Eaton, Ortenstein, P. W. Newton, Rutledge, and others.

For the mandolin we use: Branzoli's Practical Method, Arling Shaeffer's "Elite" Method, or Weissenburg's Modern Mandolin Method. Pieces by the best modern composers.

### Voice Culture.

MRS. LAURA ANDERSON.

In this branch special stress is laid on the control of breath, accuracy of tone, and distinct articulation, next the development of mind, body and voice, coöperatively. Study of intervals, scale-building, sight reading. As early as practicable the pupil is trained in phrasing. Musical expression is artistically developed in harmony with individuality of the pupil. Exercises used will be those best adapted to the needs of the pupil. Songs of the best American, English, German, Italian, and French composers used according to the progress of the pupil. Study of opera and oratorios.

For pupils desiring it, normal classes will be formed and a normal course given for the benefit of those who wish

to teach in the public schools.

Especial attention given to concerted work; duets, trios, quartettes, chorus work, and training for membership in Glee-Club.

# Theory of Music.

All students preparing for an artistic career or for that of instructor will find this a very necessary branch. The work is briefly as follows:

- 1. HARMONY—Keys, scales, intervals, formations of the triad, chord connections, and simple part writing, harmonizing bases, including all chords of the seventh and their inversions, altered and augmented chords, suspensions, modulation.
- COUNTERPOINT—Simple counterpoint in two, three and four parts. Double, triple, and quadruple counterpoint, canon fuge.
- 3. HISTORY OF MUSIC—Classes in this important branch will be arranged for the second half of the academic year in place of the beginner's harmony class. The study of history of music is necessary for graduation.

- 4. Sight Reading—All music students will be given practice in sight reading, which will be a great aid in their regular work, as the ability to read well at sight is of the utmost assistance to the performer, greatly reducing the work of preparing lessons, as well as being an important aid in accompaniments.
- 5. Teachers' Course—Those desiring to become teachers will be given a special preparation when they are sufficiently advanced in their branches.

## DEPARTMENT OF ELOCUTION AND PHYSICAL CULTURE.

JENNIE WARD BOWMAN, Instructor.

#### 1. Public Speaking and Oratory.

It is the aim in this work to give such a course of instruction and training as will lead to ease, naturalness, and correctness in the expression of thought. To accomplish this the special endowments of each student are carefully regarded.

- 1. The Teacher's Course—(a) Training for thorough understanding and mastery of vocal principles as applied to speaking and reading; (b) technical training for bodily responsiveness (gesture); (c) special work for developing harmony between mind, body, and voice—the ultimate aim being poise of being; (d) careful investigation of natural principles underlying true development of ease in expression; (e) application of advanced methods in education in teaching expression; (f) study of literature as related to expression
- 2. The Public Reader's Course—(a) Training to develop plasticity of voice; (b) study of the principles of nature and art in their relation to expression and as an aid in awakening artistic instinct; (c) study of literature in relation to expression; (d) characterization and dramatic work; (e) the relation of the speaker to the audience.
- 3. ORATORY OR PUBLIC SPEAKING—(a) Training the mind to keener appreciation of higher truths in all the relations of life; (b) systematic and individual training of voice and body to develop

ease and naturalness, and to stimulate universal sympathy; (c) training for proper action of mind in speaking; development of ease in speaking before an audience; (d) work for ease in extemporaneous speaking; (e) work to develop quickness and accuracy in debate; (f) all training in accord with nature's intention and to overcome mechanical expression.

GENERAL CULTURE COURSE—(a) Training for ease and grace of bearing;
 (b) correctness and pleasantness in the use of the voice;
 (c) development of taste and artistic instinct.

Technical training for each course is arranged by steps to be mastered in order.

The mastery of each course requires a certain amount of work each year for three years.

Three certificates of proficiency are awarded:

General Culture.

Teacher's.

Public Speaker's.

The student completing the full course receives a diploma.

## 11. Physical Culture.

The purpose of the work in physical culture is to develop and strengthen pupils normally.

Systematic and careful training is given according to individual needs. The course is adapted from the leading systems.

The gymnasium is furnished with modern apparatus.

#### COURSE IN MUSIC AND ELOCUTION.

Following is the schedule of the regular course in music or elocution.

FIRST YEAR	H	ours	
ArithmeticFIRST YEAR.	ber.		2
Algebra			3
English			4
History			3
With first year preparatory classes.			
Music or Elocution, etc			4
Recitation time.			
SECOND YEAR.			
Algebra			2
English			4
History			3
With second year preparatory classes.			
Music or Elocution, etc			8
Recitation time.			
THIRD YEAR.			
English 1			
German 1, or French 1			
Music or Elocution, etc		1	10
Recitation time.			
FOURTH YEAR.			0
English 2			
German 2, or French 2			3
Music or Elocution, etc		1	10
Recitation time.			
Terms of Tuition.			

Owing to the fact that the state provides for the expenses of the music department and a portion of the salary of the instructors, the tuition is below the usual price paid elsewhere for similar advantages.

One Term (18 weeks, 2 lessons per week). Piano, Voice Culture,	
String and Band Instruments\$	22.50
Harmony, History of Music, etc. (in classes)	5.00
Use of Pianoforte for practice (each, 1 hour daily), per term.	2.50
Elecution (in classes) free to University students	

The tuition is based upon a term of eighteen weeks, except when otherwise stated, and these rates do not apply for a less period.

The tuition is payable strictly in advance and a higher rate is charged if paid later. Pupils may enter at any time, but will not be accepted for less than one term of eighteen weeks.

No deduction can be made for lessons missed by the pupil, but such lessons may be made up within the term.

#### ART.

MISS AMMEE LEVERETT, Instructor.

(Pupil of the Pennsylvania Academy of Fine Arts and Corcoran Art School.)

### Branches Taught.

Drawing with a pencil, pen, and charcoal from life, easts and still life. Painting in oil, water color, and pastel.

Chalk engraving, in connection with illustrating, and decorative art, including pyrography, wood carving, and china painting.

Instruction in the regular course is individual and the time for work in the art room is not limited. Instruction in the teacher's course is given to classes of six to ten and the time is limited to two hours per week.

A special course in drawing and water-color work has been arranged for students preparing for public school teaching.

#### Rates of Tuition.

Regular art course, per month\$	5.00
Regular art course, per term of three months	12.00
Teacher's art course, per month	1.50

#### PREPARATORY SCHOOL.

#### INSTRUCTORS.

J. W. KUYKENDALL, Principal, Mathematics and Physiology.

G. A. Cole, Mathematics and Bookkeeping.

MRS. E. W. COLE, History and Latin.

MARY A. DAVIS, English.

MARY W. VAULX, English and History.

ROZE BENNETT, Mathematics and History.

R. E. PHILBECK, Latin, Mathematics, and Physical Geography.

J. E. BEAVERS, Woodwork and Drawing.

W. A. HARDING, Machine Work and Forging.

JENNIE WARD BOWMAN, Elocution and Physical Culture.

MRS. LAURA ANDERSON, Vocal Music.

PAUL SCHMOLCK, Instrumental Music.

Professors in the University assist in the teaching work of the preparatory school whenever such assistance as needed.

This school is maintained: first, to prepare students for admission to the Freshman class in any course in the University; second, to furnish as good an education as practicable to those who do not wish to pursue an extended course; third, to provide a suitable course for those preparing to teach in the public schools who find it impracticable to take the University normal course.

Students seeking to enter the preparatory school should be thoroughly prepared for examination in the subjects required for admission to the class to which they seek entrance.

#### Requirements for Admission to First Year Class.

1. Arithmetic. Students are examined in the whole of common school arithmetic. An accurate knowledge of the properties of numbers, fractions, measurements, etc., and

a good general knowledge of percentage and its applications are rigidly required.

2. English Grammar. The fundamental principles

of English grammar and composition.

- 3. United States History. The leading facts in American history.
- 4. Geography. The whole of some complete manual of geography.
- 5. Spelling and Writing. Proficiency in these subjects is tested by the examination papers.

# Requirements for Admission to Second Year Class.

Students desiring to enter the second year class will be examined upon the following:

- 1. Arithmetic. A thorough and accurate knowledge of the whole of common school arithmetic.
  - 2. Algebra. Academic algebra to involution.
- 3. English. English grammar completed, and elementary composition.
- 4. History. An advanced United States history, studied with special reference to growth and development.
- 5. Latin. Collar & Daniell's First Latin Book, or its equivalent, and easy sight reading. (Required of those desiring to study second year Latin.)
- 6. Physical Geography. Davis's Elementary Physical Geography or its equivalent. (Required of those desiring to take second year sciences.)

Note.—Students entering after the session has begun will be examined also in the work passed over by their class. Students who hold first grade teachers' licenses and who have had experience in teaching, will be admitted, without examination, to the second year class in the subjects covered by the l'censes. Other grades of teachers' licenses and certificates of work done in other schools will be recognized to some extent in classifying students. A stu 'ent should always bring with him all report cards and certificates of school work.

#### Examinations at Other Places than Fayetteville.

Students living at a distance from the University may obtain special local examinations, if applied for in due time before the beginning of each session. The questions will be sent on application to the principal of any school or to any county examiner. The questions must be submitted by the principal or county examiner to the candidate under the usual restrictions of a written examination, and the questions and answers must be returned by the same officer to the University with his endorsement that the examination was properly conducted.

#### Courses of Study in the Preparatory School.

The preparatory school consists of two sub-college classes, and students are required to complete sixteen hours' work in the first year class, and seventeen hours' work in the second year class as a condition of promotion to the University Freshman class. A student, having completed the prescribed preparatory work in any subject, may be admitted to the Freshman class therein, provided no preparatory study is omitted in order to take up the same.

Special courses of study are not allowed in the preparatory school, but students known to be in poor health or having physical defects which interfere with their studies, may be permitted by the faculty to defer one or more subjects and extend the course over a longer period.

The classification of preparatory students is governed by the rule stated under "Classification of Students," page 42. Studies in lower classes have precedence of higher ones. Students cannot, therefore, omit studies in the preparatory

Hours

per week.

school and take up collegiate studies except in such cases as may be allowed by the faculty under paragraph 3, page 43.

The following course of study is offered, the completion of thirty-three hours of which will entitle the student to enter the Freshman class.

FIRST YEAR CLASS.

Required Work
Arithmetic       2         Algebra       3         English       4         History of the United States and Arkansas       3
Elective Work (selected from the following)4
Latin.       4         German.       4         Physical Geography       3         Nature Study       1         Bookkeeping       1         Woodwork       2         Forge Work       1         Total       .16 hours.
SECOND YEAR CLASS.
Required Work
Algebra       2         Plane Geometry       4         English       4         History of Greece and Rome       3         Note.—Students desiring to take the course leading to the B. A. degree (see p.
p.

59 and 60), must elect either Latin or German in the preparatory classes. Students desiring to take any other course may elect any four hours' elective work in each

year.

llect	tive Work (selected from the follow	$ing) \dots$	
	Latin		
	German		
	Physiology		
	Physics		
	Civies		
	Drawing		
	Total	17	hours.

#### Teachers' Course.

This course has been arranged for students who do not desire to take a full course at the University and who wish to qualify themselves to teach in the public schools of this

0.	quality inclinatives to teach in the public schools of the
S	ate.
	FIRST YEAR CLASS.
	Hours
	per wee
A	rithmetic
	gebra
	nglish
	story of the United States and Arkansas
	ysical Geography
P	nysiology
	SECOND YEAR CLASS.
A	gebra
P	ane Geometry
	nglish

History of Greece and Rome..... Civil Government..... Pedagogy..... 3

Note.—Students desiring to prepare for the normal course (see p. 85), should take the preparatory course with Latin.

#### Detailed Work of Courses.

#### FIRST YEAR CLASS.

MATHEMATICS, 5.—Higher Arithmetic, text to be selected; Fisher and Schwatt's Secondary Algebra to Involution.

ENGLISH, 4.—(1) English Grammar; Maxwell's Advanced Grammar. (2) Composition: dictation, letter writing; class-room themes, one each week, written and rewritten, based on assigned general reading, with especial attention given to spelling, punctuation, paragraphing, and idiomatic expression. (3) For General Reading Goldsmith's Vicar of Wakefield; Addison's Sir Roger de Coverley; Lowell's Vision of Sir Launfal; Coleridge's Ancient Mariner. (4) For Careful Study: Macaulay's Essay on Milton; Burke's Speech on Conciliation. (5) For Memorizing: Coleridge's AncientMariner; Lowell's Vision of Sir Launfal.

LATIN, 4.—Bennett's Latin Lessons; Collar's New Gradatim.

GERMAN, 4.—Lange's German Method; Leander's Träumereien; von Hillern's Höher als die Kirche; Drei Kleine Lustspiele; Wesselhoeft's Composition.

HISTORY, 3.—Shinn's United States History and other texts for collateral study.

GEOGRAPHY, 3.—Davis's Physical Geography.

NATURE STUDY, 1.—Hodge's Nature Study and Life.

BOOKKEEPING, 1.—Meservey's Bookkeeping.

WOODWORKING, 4.—Principles of carpentry and joinery; wood turning; cabinet work. Sickel's Exercises in Woodworking.

FORGING, 2.—Management of fire; drawing; welding; riveting; tempering.

#### SECOND YEAR CLASS.

MATHEMATICS, 6.—Fisher and Schwatt's Secondary Algebra, completed; Beman and Smith's Plane Geometry, completed.

ENGLISH, 4—(1) Rhetoric: Hill's Foundations of Rhetoric. (2) Composition: Class-room themes, one each week, written and rewritten, based upon assigned general reading, with especial attention given to spelling, punctuation, paragraphing, and idiomatic

expression. (3) For General Reading: Tennyson's Princess; Carlyle's Essay on Burns; Shakspere's Julius Cæsar, and Merchant of Venice; Scott's Ivanhoe; George Eliot's Silas Marner. (4) For Careful Study: Shakspere's Macbeth; Macaulay's Essay on Addison; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas. (5) For Memorizing: Milton's L'Allegro, Il Penseroso, Comus, and Lycidas, and selections from Shakspere's Macbeth and Tennyson's Princess.

LATIN, 4.—Four Books of Cæsar, or an equivalent; Bennett's Grammar and Exercise Book.

GERMAN, 4—Riehl's Der Fluch der Schönheit; Freytag's Karl der Grosse; Schiller's Der Geisterseher; Lyrics and Ballads; Lessing's Minna von Barnhelm; Schiller's Wilhelm Tell; Goethe's Hermann und Dorothea; Poll's German Composition.

HISTORY, 3.—Botsford's History of Greece, first term; Botsford's History of Rome, second term.

Physiology, 2.—Hutchison's Physiology and Hygiene.

Physics, 2.—Text to be selected; lectures and written work.

PEDAGOGY, 3.—Page's Theory and Practice of Teaching; Baldwin's Art of School Management; McMurry's General Methods; McMurry's Methods of Recitation.

CIVIL GOVERNMENT, 2.—McLeary's Civil Government, Arkansas and The Nation, and Johnson's History of American Politics.

FREEHAND DRAWING, 4.—Practice Work; outline drawing from models and machine parts; plan, elevation, and section drawings.

Note.—In the preceding courses the figure after each subject indicates the number of hours per week.

#### THE MEDICAL SCHOOL.

### Little Rock, Ark.

#### Board of Trustees.

J. A. DIBRELL, M. D., Little Rock, Ark.

WM. B. LAWRENCE, M. D., Batesville, Ark.

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#### Faculty.

HENRY S. HARTZOG, LL. D.,

President of the University.

JAS. A. DIBRELL, M. D.,

Professor of General Descriptive and Surgical Anatomy, and President of Faculty.

EDWIN BENTLEY, M. D.,

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Demonstrator of Anatomy.

E. E. MOSS, A. M., LL. B.,,

Professor of Legal Medicine.

WILLIAM A. SNODGRASS, M. D.,

Professor of Anatomy.

Four assistant demonstrators of anatomy to be supplied. Subordinates to the different chairs to be supplied.

### Special Clinical Lecturers.

R. W. LINDSEY, M. D.,

W. P. ILLING, M. D.,

C. E. WITT. M. D.

# Twenty-Fifth Annual Announcement

OF THE

#### UNIVERSITY OF ARKANSAS MEDICAL COLLEGE.

The Regular Winter Course of lectures will begin on Monday, October 19, and continue until April 9, 1904.

Lectures will be delivered daily during the six days of each week.

The matriculation book will be opened from and after September 1, to students desiring to matriculate early and secure choice of seats.

In making this annual announcement the faculty feels great satisfaction in referring to the continued success and prosperity of the medical department. The cordial endorsement of the Arkansas Medical Society and the generous influence of the medical profession throughout the state are highly appreciated and encourage the faculty to continue the arduous labors it has so long and zealously maintained.

### Four Years' Graded Course.

First Year. Anatomy, practical anatomy, physiology, chemistry, physics, histology, medical ethics, and materia medica.

Second Year. Anatomy, practical anatomy, physiology, chemistry, materia medica, pathology, obstetrics.

Third Year. Materia medica and therapeutics; toxicology, obstetrics and diseases of children, physical diagnosis, diseases of the eye and ear, practice of medicine, surgery.

Fourth Year. Review of all branches, practice of medicine, surgery, dermatology, gynecology, bacteriology, urinology, venereal diseases, diseases of the nervous system, medical jurisprudence.

#### Matriculation.

As required by the rules and regulations of the Association of American Medical Colleges; students on matriculating are required to present credentials showing that they are matriculates or graduates of recognized colleges of literature, science or arts, of high schools, academies, normal schools, or equivalent schools, or that they have teachers' certificates.

Graduates and matriculates in medicine, dentistry or pharmacy, on presenting credentials, are exempt from the entrance examination.

To avoid delay, students entitled to matriculate without examination are requested to bring their certificates with them and present them on arrival at the college.

Students not entitled to exemption, as hereinbefore provided, are required to pass an entrance examination, with the following requirements: the writing of an English composition of not less than 200 words; the translation of easy Latin prose; a knowledge of the elements of arithmetic or algebra, and of elementary physics.

#### Location.

The city of Little Rock is conveniently situated in the center of the state, and railroads enter from every direction, making it easily accessible.

It has a population of more than 40,000, and has always been classed as one of the most healthful cities west of the Mississippi river. Few places can boast of better public schools, colleges, and universities than Little Rock. All the eleemosynary institutions of the state are located here. These are the School for the Blind, Deaf Mute Institute, and the Insane Asylum.

# Medical School Building.

The new structure is an imposing edifice, three stories in height, constructed of brick and admirably arranged for the convenience of both students and instructors.

It has a large lecture hall, a fine amphitheater with chairs, a library, a reading room, a museum, several dissecting rooms, all well lighted and ventilated. In fact, it is designed to be a modern and model medical college building. It is situated on Second and Sherman streets.

### Hospitals.

The Logan H. Roots Memorial Hospital.—By the munificence of the late Colonel Logan H. Roots and the benevolence of his widow, the city of Little Rock has an elegant and commodious public hospital.

The medical department of the University is fortunate in having this hospital situated on lots adjoining its own building, thus promising greatly increased clinical facilities.

The St. Vincent's Infirmary—formerly called Little Rock Infirmary—designed solely for the treatment of acute diseases, has a capacity of nearly a hundred beds. This hospital is splendidly equipped and furnished with modern conveniences and improvements, is in the very best sanitary condition, and under the supervision and management of trained nurses, Sisters of Charity.

This magnificent institution just completed, conveniently situated, is the finest and best equipped institution of the kind in the Southwest. The hospital is much enlarged and up-to-date in every respect.

The Pulaski County Hospital, erected at a cost of some \$30,000, is a handsome brick structure, well arranged, complete in all its equipments, and has a capacity of 200 beds.

Accidents from railways, marine patients and the sick and injured from the city, county and state, find in these hospitals shelter, food, raiment and that Christian attention so cheering and comforting in sickness and distress.

The inmates of these different institutions embrace all classes and conditions of people—white, colored, male, female, adults, and children—and with them are found almost every form of malady except quarantinable diseases, which are otherwise provided for.

### "The Isaac Folsom Clinic."

This clinic is thus designated in honor of the late Dr. Folsom, and in consideration of his liberal endowment of \$20,000.

The daily instruction in this clinic is thoroughly practical, and is attended by a large number of outdoor patients from the city and surrounding country. It embraces a wide range of diseases and injuries. More than 6,000 patients attended this clinic last year.

### Methods of Teaching.

Instruction will be given by didactic and clinical lectures, practical work in the dissecting room, chemical and physiological laboratories, and by daily quizzes upon the subject of preceding lectures.

When the subject will admit of it, each branch will be so illustrated by means of diagrams, charts, models and instruments, as to address the understanding of the student through the medium of sight as well as hearing.

### Expenses of Living, Etc.

The expenses of living in the city of Little Rock will. of course, vary according to the views and habits of students. Good board, at the present time, including lodging, fuel and lights, may be had at a convenient distance from the college, at from \$4 to \$6 per week, and from \$13 to \$18 per month.

Students on their arrival are requested to visit the University building, corner Second and Sherman streets, where a list of persons desiring to board medical students will be found.

Persons desiring further information are requested to address the secretary of the faculty.

#### Terms.

The fee for a full course of lectures will be:

General Ticket	\$50.00
Matriculation Ticket (paid but once)	5.00
Demonstrator's Ticket (for each course)	5.00
Hospital Ticket (each course)	3.00
Graduation Fee	25.09

No variation is made, under any circumstances, from the established fees of the college, they having been placed originally at the very lowest figure commensurate with the interest of both student and college.

For more specific information and catalogue apply to

F. L. FRENCH, M. D., Secretary of Medical Faculty.

Little Rock, Ark.

Note.—Alumni are requested to inform the Secretary of their present postoffice address, and of any change of location, in order that they may have the annual catalogue fowarded to them regularly.

#### LAW DEPARTMENT.

# Little Rock, Ark.

#### Officers.

HENRY S. HARTZOG, LL. D., President.

J. H. CARMICHAEL, LL.B., Dean.

THOMAS N. ROBERTSON, LL. B., Secretary.

#### Faculty.

J. H. CARMICHAEL, LL. B., DEAN. Contracts, Pleadings and Practice.

JOHN FLETCHER, LL. M., Real Property.

WILBUR F. HILL, LL. B., Equity Jurisprudence.

GEORGE W. MURPHY, LL. B., Law of Evidence.

TOM M. MEHAFFY, LL. B., Criminal Law, Practice, and Procedure.

E. W. WINFIELD, LL. B., Judgments.

J. F. LOUGHBOROUGH, LL. B., Commercial Paper, Domestic Relations.

LEWIS RHOTON, LL. B., Law of Torts.

DEADERICK H. CANTRELL, LL. B., Corporations.

T. N. ROBERTSON, LL. B., Agency, Insurance.

T. E. HELM, LL. B., Partnership.

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#### Lecturers.

U. S. SENATOR JAMES P. CLARKE, LL.B.

JUDGE JACOB TRIEBER, LL. B.

MORRIS M. COHN, LL. B.

GEORGE B. ROSE, LL. B.

JAMES H. HARROD, LL. B.

#### Purpose.

It is not the purpose of the law department of the University of Arkansas to persuade any person to study law; but the department solicits the attendance of those who have determined to take up the study, either with a view of entering the legal profession or for the practical aid a knowledge of the law will afford them in the successful prosecution of some commercial enterprise. It is to be presumed that every true son of Arkansas, who anticipates enlisting in the profession of the law within the state, has sufficient state pride to select his home institution as the proper place to prepare himself for his chosen profession, when the advantages it affords are equal, and for him, in many important particulars, superior to those of similar institutions elsewhere. Every lecturer and instructor in this department is a practicing lawyer, making a comfortable living out of his profession, and has not resorted to the law school work for the purpose of earning a livelihood, but simply for the purpose of maintaining this important department of the state University, to meet the demands of the young men who are to constitute the future lawyers of our state.

#### Course of Instruction.

The course of instruction covers a period of two years, consisting of four terms. We deem a shorter period insufficient for the proper preparation of the student of the law for his profession. In the language of a distinguished jurist, "He who is not a good lawyer when he comes to the bar will seldom be one afterwards." Our method of instruction consists of daily recitations upon previously assigned lessons in the text-books, with special lectures to emphasize the conclusions of the author and to enlarge the student's conception of the same. We deem the above system of instruction, with daily recitations largely predominating, superior to either the recitation or lecture system when pursued alone. In addition to the above, students are required to prepare and submit to the professors legal papers in the form of briefs upon the various topics of the text writers, thus combining the abstract theory of the law with the practical application of the same to the different sets of facts embraced in the various decisions of the courts consulted by the student while preparing his paper. The course of study for the two years will embrace the subjects named and assigned, as follows:

#### JUNIOR YEAR.

First Term.—Contracts, Agency, Commercial Paper, Torts, Bailment.

Second Term.—Criminal Law, Evidence, Pleading, Insurance, Partnership.

#### SENIOR YEAR.

First Term.—Real Property, Equity, Corporations, Domestic Relations, Frauds and Fraudulent Conveyances.

Second Term.—Real Property, Judgments and Lectures upon Constitutional Limitations, Private and Public International Law, Federal Practice, Bankruptcy, Medical Jurisprudence, Legal Ethics. The first term of both junior and senior courses begins on the third Monday in September, and ends on the 18th of January following; the second term of each course begins on the 20th of January, and ends on the first Friday in June.

#### Admission.

While we fully appreciate the advantages of a thorough collegiate training in the various academic branches as a preparation for the study of the law, we have not made such acquirement a prerequisite to admission to this department. Applicants will be admitted to take up the studies of the junior course who are possessed of a fair English education, such as may be acquired in our public schools. Students may be admitted to the senior course upon producing sufficient proof of their having given the necessary time and study to the different subjects of the law, either in another law school or under the directions of a practicing lawyer, but no student will be granted the degree until he has passed a satisfactory examination on all the branches embraced in the full course for the two years.

No student will be permitted to take both the junior and senior courses in a single year, unless at the time of his admission he is a licensed attorney, or has completed in some law school, or carefully read under the directions of a reputable lawyer, as much as two-thirds of the subjects embraced in the junior course of this school or their equivalent in other subjects of the law.

#### List of Text-books.

Tiedeman on Real Property. Greenleaf on Evidence. Bispham's Principles of Equity. Bishop's New Criminal Law. Anson on Contracts. Mechem on Agency. Mechem's Elements of Partnerships. Tiedeman on Bills and Notes. Cook on Stock and Stockholders. Lawson on Bailments. Hale on Torts. Freeman on Judgments. Rogers on Domestic Relations. Bliss on Code Pleading. Cooley on Constitutional Limitations. Wharton on Conflict of Laws. May on Insurance. Brandenburg on Bankruptcy. Reese on Medical Jurisprudence. Federal Practice and Legal Ethics—Lectures.

#### Moot Courts.

Moot Courts begin with the last term of the junior year, and continue throughout the course, and shall be termed the judicial department of the school, and shall embrace all the courts—justice, probate, circuit and supreme—all modeled according to the constitutional requirements of our state.

The supreme court shall consist of three judges, a chief justice and two associates.

Circuit Court—The circuit court shall consist of one judge, a clerk and a sheriff, to be elected by the students.

County and Probate Court shall consist of one judge, a sheriff and a clerk, to be elected by the students.

Justice of the Peace Court shall consist of a member of the senior class, who shall be elected by the student body.

These courts shall be under the immediate supervision

of the dean, who will be assisted by the members of the faculty in compiling statements of facts embracing principles of law pertaining to the respective branches under their instruction, for the use of said courts.

### Goar Lyceum.

This society is composed of the students of both the junior and senior years, and meets regularly every Wednesday night during the session. The exercises shall consist briefly of theses and debates embracing subjects legal in their nature. The performance of these exercises is insisted upon by the faculty, for such practice enables the student to acquire the invaluable faculty of learning "to think whilst on his feet," besides giving him an easy manner of address in public speaking.

#### Examinations.

Written examinations are held each term in the presence of a member of the Faculty, upon questions handed the student at the time, and on the merit of their papers students will be graded.

# Degrees.

The degree of Bachelor of Laws will be conferred upon all students who have passed an examination on each of the subjects embraced in the course, and have attained the average standard grade of proficiency.

### Admission to the Bar.

By a recent act of the legislature all graduates of the Law Department of the University are admitted to the practice of law in the supreme court and all inferior courts of the state without the requirement of an examination.

#### Class Honors.

Honorable competition is the life of all enterprise; therefore, we confer the following evidences of distinction: Upon the student attaining the highest average grade, shall be conferred the distinction of the first honor man of his class; the one attaining the next highest, the second honor man; and the one making the next highest, the third honor man.

The faculty authorizes the selection of three orators to deliver orations at the commencement exercises, as follows: The Senior Class, one; the Junior Class, one; the Goar Lyceum, one.

# Advantages of Location.

An arrangement is made with the Supreme Court Clerk whereby each student may use the Supreme Court Library, the finest in the South, where almost any book on a legal subject may be found. It contains all the reports from the year books to the 68th Arkansas—about 20,000 volumes—most all the text-books from Coke to Rogers on Domestic Relations.

This being the capital city, the legislature meets here. The student may, during his course of two years, see one session of the legislature. He has a chance to see and study our state law machine, study parliamentary rules and practices, and meet representative men from all parts of the state. The acquaintance is well worth the making, and there are other pleasant associations arising from attending a home institution that are invaluable in after life.

We have the supreme court, which is in session about nine months in the year. It holds two open sessions a week, and the attendance upon this court is a good school within itself. There is an opportunity offered for the student to hear the ablest lawyers in the state argue cases, and hear the judges render judgments and deliver opinions.

We have a federal district court, and the circuit court of appeals will hold a session there each winter. An opportunity is offered the student to observe the practice and workings of the federal court as well as that of the state. We have two state circuit courts in session about six months in the year.

A chancery court presided over by one of the ablest chancellors in the country. And the student, while studying equity, will have an opportunity to observe some of its practical workings.

A county and probate court and about fourteen justices of the peace.

There is nothing to prevent the student from acquiring all the practical knowledge that he may wish from observation and example.

An able bar, who are all kind and courteous to the student, and willing to aid him in any and every way.

A semi-tropical climate, just the place to spend a winter free from the intense cold, and a city of not sufficient size to lead him into evil associations and practices.

# Professional Ethics.

While the endeavor is to impart a knowledge of the fundamental principles of the law, the subject of professional ethics will be given special attention and its demands constantly impressed upon the minds of the students as indispensable to the attainment of an honorable and successful career as a lawyer.

# Tuition and Expenses.

Tuition			 	 			. \$	50	per	· c	ou	rse	(	of o	ne	year	
Tuition																	
Board and	lod	ging.	 	 	 	 			\$	15	to	\$2	0	per	· I	nonth	1.
Text-books																	
Diploma			 	 	 											.\$5.0	0

No library or society fees are required of students.

All communications should be addressed to the Secretary.

T. N. ROBERTSON, Little Rock, Ark.

#### BRANCH NORMAL COLLEGE.

### Pine Bluff, Ark.

#### Faculty.

ISAAC FISHER, Principal,

Mental and Moral Sciences, Literature.

\* JAMES C. SMITH, A. B., Latin, Mathematics and Civics.

JOHN H. MICHAEL,

English Grammar, Rhetoric and Physical Sciences.

ANNA C. FREEMAN, L. I.,

Arithmetic, Geography and Drawing.

IRENA V. COLEMAN, L. I.,

History and Arithmetic.

MATTIE I. BENSON.

Dressmaking, Typewriting and Music.

#### Department of Mechanic Arts.

B. N. WILSON, B. Sc., M. E.,

Superintendent of Mechanic Arts.

W. S. HARRIS.

Assistant Superintendent of Mechanic Arts.

J. L. ROSS,

Instructor in Machine and Forge Shops.

#### General Statement.

The Branch Normal College is a department of the University of Arkansas, established pursuant to an act of the General Assembly of the State of Arkansas, approved

\*Part of term.

April 25, 1873, and has been in operation since September 27, 1875. Its primary object is the training of teachers for efficient services in the colored public schools of the state—the law referred to having been enacted with special reference to the "convenience of the poorer classes." For the purpose of carrying out the intent of the law, tuition is made free to all appointees, the only requirements for admission being suitable age and qualification, and appointment by one of the county judges, and the payment of the entrance fee of \$5. Other students pay in addition \$1 per month in advance.

#### Location, Etc.

The school property consists of a beautiful tract of twenty acres of ground, in the suburbs of Pine Bluff, Jefferson County, Ark., and a few rods from the junction of the Missouri Pacific and the St. Louis & Southwestern railroads. The school building, completed in 1881, and occupied January 30, 1882, is one of the handsomest educational edifices in the state, as well as one of the best, being steam heated, electric lighted, and well ventilated. It contains one large assembly room, four recitation rooms, and cloak room for males and females. The building is of brick, with slate roof and trimmings of Alabama granite, and cost, with improvements and furniture, about \$20,000. The furniture and other equipments are of the best modern style.

The dormitory, a handsome brick building of seventeen rooms, and the mechanical department building, are upon the same grounds.

# Appointment of Beneficiaries.

By the laws of the State, the appointment of students to the Branch Normal College in numbers from each county in the state is the same as to the parent University at Fayetteville. The power is vested in the county courts, but any vacancies occurring during the vacations of the court shall be filled by the judge of the county court.

All students thus appointed are entitled to four years' free tuition upon the payment of \$5 matriculation fee, in advance at the time of entering the school.

These appointments are not transferable, and students holding them must be very careful that their conduct is not such as will lead to their forfeiture; and it may also be stated that the principal reserves the right to declare forfeited the appointments of those students who are not present at the opening of the autumn term.

Students planning to enter the school should go to their county judges for appointments, which, if received, must be brought to the college. Blanks for appointments may be secured by addressing Principal Isaac Fisher, Pine Bluff, Ark.

#### Normal Department.

The school offers a good strong course of training for those who plan to become teachers. More and more the aim will be to give scientific instruction in the matter of teaching the branches of the public schools. In the literary department, two courses are planned—one leading to the certificate of Licentiate of Instruction (L. I.) and the other to the degree of Bachelor of Arts (A. B.). Applicants must pass a satisfactory examination in the ordinary English branches to be able to enter this department. Primary students will not be admitted.

# The Mechanic Arts Deparment.

This department offers a splendid opportunity to young colored men to become skilled blacksmiths, machinists and engineers or firemen. The mechanic arts course and the manual training normal course are strong combinations of shop work and literary training. It is hoped these courses will from time to time attract young men who desire to fit themselves for highest usefulness by preparing for the pursuit of those occupations for which there is a strong demand. In addition to these there is offered a course in woodworking, which comprises cabinet making, pattern making and carpentry.

#### Department of Plain Sewing.

Young women are here given an opportunity to learn plain sewing, crocheting and art needlework. A fine outfit of sewing machines and other requisites for doing the work planned for this department comprise the equipment.

## Typewriting and Stenography.

These are taught one hour each day. Shorthand classes will be formed whenever a sufficient number of students desire to pursue this study.

#### General Exercises.

The general exercises include reviews of the Sunday school lessons and of the events of the week; also music and drawing. There are regular lessons in vocal music which are given to all students. Students will frequently be required to give public evidence of their skill in using the library intelligently. All exercises must be attended faithfully.

#### Expenses.

For all students, entrance fee, in advance\$5.00
Board, fuel and light, for girls in the dormitory 8.00
Board, fuel and light, in private families\$8 to \$10.00
Non-beneficiary students for tuition, per month\$1.00

Books at usual retailers' price.

Entrance fees and board bills are payable in advance.

Parents will please send money for daughters' board direct to the Principal and not to the girls.

#### Calendar.

Opening—First Monday in September.

Examination—First Week in September, Third Week in January and May.

Closing—First Week in June.

COMMENCEMENT—First Tuesday in June.

EXHIBITS—Shops, Needlework, Typewriting and Drawing: First Wednesday in June.

ALUMNI ASSOCIATION—First Wednesday in June.

REUNION-First Thursday in June.

#### REGISTER OF STUDENTS.

ABBREVIATIONS.—B. A., Bachelor of Arts; B. Ph., Bachelor of Philosophy; B. S., Bachelor of Science; M. E., Mechanical Engineering; E. E., Electrical Engineering; C. E., Civil Engineering; L. I., Licentiate of Instruction; B. S. A., Bachelor of Science in Agriculture.

Note.—The names of the students in the Medical and Law Departments at Little Rock, and the Branch Normal College in Pine Bluff are not included in this register, but are published in the special catalogues of these departments.

# Graduates:

Mooring, D. C., B. S. . . . . . . . M. S. Cotton Plant . . . Woodruff.

POST OFFICE COUNTY

NAME

Trondway William A E E

Treadway, William A., E. E M. E.	Little Rock Pulaski.
Seniors.	
Bates, Nora MadgeB. A.	Boonsboro Washington.
Billings, Fred Merritt C. E.	Marianna Lee.
Blaylock, John Charles, C. E.	Fayetteville Washington.
Brewster, Hugh B. A.	Cane HillWashington.
Bryan, Lemuel Berry C. E.	Fort Smith Sebastian.
Cartwright, Wm. WB. A. and B. S.	Mountain View Stone.
Clark, ElbertB.S.	Waldo Columbia.
Crozier, Elizabeth Eleanor B. A.	Dutch Mills Washington.
Daniels, Houston T C. E.	Little Rock Pulaski.
Davis, Frank Hill	Lowell Benton.
Droke, Lelia Ruth B. Ph.	Fayetteville Washington.
Ellis, John Robert E. E.	Fayetteville Washington.
Harris, William MarvinB. A.	MonticelloDrew.
Holt, Fred WhiteB.A.	Bellefonte Boone.
Honnett, Alphonzo Milton E. E.	Pine BluffJefferson.
Langford, Bertram WilliamB. Ph.	BentonvilleBenton.
Longino, Jas. Leland. E. E. and M. E.	MagnoliaColumbia.
McGehee, Abner B. A.	Little Rock Pulaski.
Melton, Hattie Clementine B. A.	Fayetteville Washington.
Middleton, Robert JamesC. E.	Fayetteville Washington.

Mitchell, Samuel AlfredB. Ph.	Fayetteville Washington.
Muller, James Frederick M. E.	Little RockPulaski.
Rife, Wm. Benjamin B. S. and B. Ph.	Osage Mills Benton.
Ruggles, William Arthur E. E.	Fayetteville Washington.
Streepey, John Paul	Hot Springs Garland.
Taylor, RupertB. A.	JonesboroCraighead.
Vaulx, Susie EugeniaB. A.	Fayetteville Washington.
Womack, Joseph Pitts B. Ph.	CentertonBenton.
Juniors.	
Abercrombie, Jas. ScottB. A.	BryantSaline.
Blanchard, Fay H B. Ph.	Fayetteville Washington.
Bloom, John Rhine E. E.	Pine BluffJefferson.
Burney, Margaret Sue B. A.	Green ForestCarroll.
Chapman, Johnson C. E.	Lake VillageChicot.
Chapple, Earl White E. E.	Little RockPulaski.
Davies, Mary LouiseB. Ph.	Fayetteville Washington.
Droke, Marvin JosephineB. A.	Fayetteville Washington.
Gray, Clifton WelchB. A.	Little RockPulaski.
Harding, Arthur McCraken B. A.	Fayetteville Washington.
Lark, William Henry	LancasterCrawford.
Leverett, Edward Vaulx M. E.	Fayetteville Washington.
McAlester, William Edward E. E.	McAlester I. T.
McCrary, Edgar WareC. E.	Nashville Howard.
McMurtrey, Elisha Franklin C. E.	Rison
Milum, Roy Wamon B. A.	Lead Hill Boone.
Morrow, Hugh EllisB. S.A.	Fayetteville Washington.
Mullins, George WalkerB. A.	Fayetteville Washington.
Pratt, Fletcher HowardC. E.	Fayetteville Washington.
Ragland, Henry SparrC. E.	Fayetteville Washington.
Risser, Thomas Scott E. E.	Fayetteville Washington.
Shellenberger, Alice B. Ph.	Fayetteville Washington.
Stanford, Albert FranklinC. E.	Fayetteville Washington.
Quarles, Tevie RandolphM. E.	Fayetteville Washington.
Swearingen, Samuel Conrad B. Ph.	Lee's CreekCrawford.
Vaulx, Eleanor B. Ph.	Fayetteville Washington.
Walker, James WalterB. A.	Hindsville Madison.
Webster, Fay E. E.	MarvellPhillips.
Wood, Chas. Fox	ParisLogan.

# Register of Students.

# Sophomores.

- Copins and Copins an	
Abercrombie, BerthaB. A.	Pactolas Benton.
Austin, Robert Edward LeeB. Ph.	Fayetteville Washington.
Beard, Abner H C. E.	Wynne
Carter, Edward LeroyB. A.	St. Paul Madison.
Carothers, Neil B. A.	Fayetteville Washington.
Clegg, Chester B	Siloam Springs Benton.
Cromwell, Charles W	Fort Smith Sebastian.
Croom, Cleveland W B. A.	Dardanelle Yell.
Dickinson, William EmmettB. A.	Horatio Sevier.
Dickinson, Will DeWoodyC. E.	Kingsland Cleveland.
Holt, James SeaborneB. A.	Bellefonte Boone.
Hudgins, J. GuyB. A.	Fayetteville Washington.
Hurst, George AbnerB. A.	Fayetteville Washington.
Jackson, Bruen OvertonB. A.	HamburgAshley.
James, John John B. A.	Maysville Benton.
Kitchens Benton Mackey B. A.	ParagouldGreene.
Kunz, Elmer HuettB. A.	Fayetteville Washington.
Legate, Clyde HolmeB. Ph.	MenaPolk.
McCrory, Grover GarlandC. E.	McCroryWoodruff.
McGehee, BenjaminC. E.	Little RockPulaski.
Moore, Henrietta B. A.	Fayetteville Washington.
Morrow, Donald B E. E.	Booneville Logan
Neeley, John E B. A.	Fayetteville Washington.
Nelson, Jerry RufusL. I.	De Queen Sevier.
Oakes, George Cromer B. A.	Pocahontas Randolph.
Olney, Lee SE. E.	MenaPolk.
Pratt, Darwin HyppolyteC. E.	Fayetteville Washington.
Reves, Claude MyrtleB. A.	Elmer Crawford.
Roberts, K. T	Pine BluffJefferson.
Sadler, William LloydC. E.	Little Rock Pulaski.
Sengel, Jerome	Fort Smith Sebastian.
Stone, Ben Hicks B. A.	Fayetteville Washington.
Stotts, Charles Hiram B. A	Huntsville Madison.
Taylor, Robert Pierce M. E.	Siloam Springs Benton.
Thomas, Bessie LeolaB. A.	Fayetteville Washington.
VanValkenburg, Horace BullB. Ph.	Warren Bradley.
Whitehead, A. Dixon	Taylor Columbia.
Williams, Beulah B. A.	Fayetteville Washington.
Wilson, John RufusB. Ph.	Warren Bradley.

## Freshmen.

Andrix, E. B E. E.	Fayetteville Washington.
Austin, Hamilton L C. E.	Van Buren Crawford.
Barrett, Frank Brown	JonesboroCraighead.
Blackshare, Plant Leslie	CrockettClay.
Blair, LeliaL. I.	Van Buren Crawford.
Blair, LeoraL. I.	Van Buren Crawford.
Blevins, Annie Bell L. I.	Dardanelle Yell.
Boles, Edwin Clifford M. E.	Favetteville Washington.
Booker, Paul RobertC. E.	Washington Hempstead.
Borders, John Maloy	Fayetteville . Washington.
Brunskog, Karl WaldemarC. E.	BentonvilleBenton.
Buford, Charles HomerB. A.	Newport Jackson.
Butler, Melvin Davis	GrahamI. T.
Byrne, Lloyd Randolph	Luna Chicot.
Caldwell, Walter O M. E.	Fort Smith Sebastian.
Campbell, Lonnie LeeB. A.	Newport Jackson.
Carpenter, Samuel C. E.	Arkadelphia Clark.
Castleberry, Benjamin Rex B. Ph.	SalineFulton.
Cheatham, Wilbur Richard B. A.	Princeton Dallas.
Clark, Lula McDonaldB. S.	MenaPolk.
Cochrane, Leroy Adams	ShawneeI. T.
Coker, E. A	YellvilleMarion.
Cole, MaryL. I.	Prairie Grove Washington.
Collins, Thomas AbeB. A.	De Queen Sevier.
Combs, Walter C. E.	Mountain Home Baxter.
Crouch, P. M E. E.	Texarkana Miller.
Cubage, John Granville B. Ph.	Amity Montgomery.
Dalton, C. E E. E.	Fayetteville Washington.
Davies, Sam GreenB. A.	Fayetteville Washington.
Davis, Barbara ClaireB. S.	Fayetteville Washington.
Davis, John Benjamin B. S.	Fayetteville Washington.
Dickinson, Horace JB. A.	Kingsland Cleveland.
Dickinson, W. W M. E.	Little Rock Pulaski.
Eason, Alcuin Pitt	Fayetteville Washington.
Fergus, Francis HerbertB. A.	Elm Springs . Washington.
Forman, Chas. Doss B. S. A.	Chelsea I. T.
Gardner, Joseph Watt B. A.	Salem Fulton.
Gorman, H. F. P E. E.	Forrest City St. Francis.

Gray, BerthaL. I.	Hickory Valley .Indep'nce.
Gray, Justin GB. A.	Hickory Valley .Indep'nce.
Gregg, Sarah EdnaB. S.	Fayeffeville Washington.
Grubbs, John MonroeB. Ph.	MoodyDrew.
Harding, Charles P	Fayetteville Washington.
Harkey, Millis PrestonB. A.	HarkeyYell.
Harrington, RobyB. A.	HelenaPhillips.
Harris, LomaB. S.	BentonvilleBenton.
Hatfield, S. L E. E.	Wagoner I. T.
Holland, Wyatt ClevelandB. S.	Greenwood Sebastian.
Howard, Albert SocratesB. S.	Ellsworth Logan.
Hunt, Harry GilhamB. A.	Walnut Ridge Lawrence.
Jacks, Maston Edwards B. S.	MariannaLee.
Johnson, Mabel ClareB. A.	Fayetteville Washington.
Justice, Isis Blanche B. A.	Gravette Benton.
Lide, James	CamdenOuachita.
Martin, Guy	PowhatanLawrence.
Mashburn, Ernest E C. E.	PhiladelphiaIzard.
McMurray, Henry MC. E.	Luna Chicot.
Mitchell, Owen CecilB. S.	Fayetteville Washington.
Mitchell, Lucian C. E.	Fayetteville Washington.
Mock, T. P	Prairie Grove Washington.
Moore, Henrietta B. A.	Fayetteville Washington.
Mullins, Thomas C C. E.	Fayetteville Washington.
Myrick, C. E	Clarendon Monroe.
Oates, Charles E L. I.	Martinville Faulkner.
O'Brien, John Joseph C. E.	Arcadia Missouri.
Payne, Brodie B. A.	Hot SpringsGarland.
Pharr, William RisonC. E.	Marianna Lee.
Phillips, Roberta GraceB. A.	Fayetteville Washington.
Pollard, Will AB. A.	GaitherBoone.
Pope, Arthur DB. S.	Taylor Columbia.
Reagan, Zenas Litton	Fayetteville Washington.
Redden, Albert B. A.	Harrison Boone.
Rhea, W. H E. E.	Cincinnati Washington.
Rowe, Prentiss Eldon B. S.	Greenwood Sebastian.
Sadler, Daniel KenardB. A.	BoonevilleLogan.
Shicker, E. B E. E.	CamdenOuachita.
Seamans, Pinkney SamuelC. E.	DermottChicot.

Shook, SarahB. Ph.	Carter Washington.
Smythe, J. L	Fort Smith Sebastian.
Snapp, Walter LeekB. S.	BentonvilleBenton.
Stanford, James Butt B. S.	Fayetteville Washington.
Stewart, SanfordB. A.	MagnoliaColumbia.
Stone, EthelL. I.	Waldron Scott.
Stone, James Hicks C. E.	Fayetteville Washington.
Triplett, Gerald E. E.	Pine BluffJefferson.
Webb, Charles WallaceB. Ph.	Texarkana Miller.
Weber, Louis William B. A.	HindsvilleMadison.
Williams, Dona ErnestineB. A.	Fayetteville Washington.
Winters, Winston LeeC. E.	Fort Smith Sebastian.
Woods, C. R E. E.	ClarksvilleJohnson.
Specials.	
Adams, George Howard	EnidOkla.
Berry, Fred Hugh	BentonvilleBenton.
Bolinger, Mae	Lead Hill Boone.
Bourland, James	Fort Smith Sebastian.
Brockman, Edward Wilson	Garnett Lincoln.
Bunch, Joel Burton	Harrison Boone.
Castleberry, William Leslie	SalineFulton.
Chenault, Louise Fletcher	AshvalePulaski.
Chitwood, Russell Garfield	Dardanelle Yell.
Chitwood, Zena Elizabeth	DardanelleYell.
Clark, Flora Lockhart	MenaPolk.
Cotton, Maurice Lafayette	Branch Franklin.
Dearing, William Nelson	WilcocksonNewton.
Douglas, Ella Marie	RogersBenton.
Gallaway, Margaret Bell	Fayetteville Washington.
Gray, Lila Fillmore	Fayetteville Washington.
Hamilton, Eileen Kathleen	Fayetteville Washington.
Harkey, Opal Noal	Ola Yell.
Harvey, Annette Halliday	Monte Ne Benton.
Hutcherson, Lillian Kathaline	Fayetteville Washington.
Ingersoll, William Henry	Berryville Carroll.
Johnson, A. J	GarnettLincoln.
Jones, Coulter W	Lono
Jordan, Grace	Fayetteville Washington.

Keeney, Augusta Rothwell	Johnson Washington.
King, Vera	Fayetteville Washington.
Legate, Ray H	Mena Polk.
Maguire, Eva Josephine	Fayetteville Washington.
McMillan, Della	Fayetteville Washington.
McVay, Gratton Gregory	LehighI. T.
McVey, George Alfred	ParisLogan.
Mitchell, Brainard	Fayetteville Washington.
Mitchell, Russell Constantine	Fayetteville Washington.
Nordmeyer, Charles Dudley	Fayetteville Washington.
Oliver, Bessie	Fayetteville Washington.
Peterson, William James	VestaFranklin.
Phillips, Charles Oliver	Fayetteville Washington.
Rutherford, Thomas Egbert	Hot Springs Garland.
Taylor, Lena	BentonvilleBenton.
Waddell, W. E	Tyler Texas.
Watkins, Guy	Fayetteville Washington.
Wilson, Constant Perkin, Jr	Fort Smith Sebastian.
Wilson, William Oscar	CabotLonoke.
Witte, August Carl	Fayetteville Washington.
Short Course in Eng	ineering.
Catts, Erwin Campbell M. E.	Washington Hempstead.
Chase, Guy Edwin	Fort Smith Sebastian.
Cleveland, George M. E.	Fayetteville Washington.
Faucette, Karl Shurz M. E.	Stamps Columbia.
Ford, E. P E. E.	Judsonia White.
Jackson, Wilburn M. E.	Cane HillWashington.
Jones, R. J	Fayetteville Washington.
Kantz, Fred E. E.	Fayetteville Washington.
McKennon, B. CE. E.	ClarksvilleJohnson.
Mackey, Dudley Earl	Fayetteville Washington.
Murph, D. H E. E.	SmackoverUnion.
Pool, R. Y E. E.	Cincinnati Washington.

#### PREPARATORY SCHOOL.

ABBREVIATIONS.—A., Arts Course, leading to B. A. Course; S., Science Course, leading to B. S. Course; E., Engineering Course, leading to the Mechanical, Civil, and Electrical Engineering Courses; T., Teachers' Course.

#### Second Year Class.

NAME	COURSE	POST OFFICE COUNTY
Abercrombie, Clara	S.	Pactolus Benton.
Abraham, Howard		ArkadelphiaClark.
Allen, Annie Mary	A.	Farmington Washington.
Baker, Grover Clinton	E.	Harrison Boone.
Ballard, Ben Calvin	A.	Durham Washington.
Ballard, Jexrod Mark	A.	Durham Washington.
Barham, Henry Ward	E.	Fayetteville Washington.
Barrett, Lou Ella	S.	JonesboroCraighead.
Barrett, Reuben Monroe	A.	JonesboroCraighead.
Barton, Maude L	A.	CovePolk.
Beauchamp, John Lee	E.	Fayetteville Washington.
Beloate, Clarence Edgar	A.	CorningClay.
Bennett, Charles Galloway	A.	Batesville Independence.
Berry, Jessie Harold		Huntsville Madison.
Blair, Daniel Baxter	E.	Decatur Benton.
Blakemore, Thomas Lester	A.	Uniontown., Crawford.
Blakemore, Loren Everett .		Uniontown Crawford.
Block, David	S.	VanndaleCross.
Boles, Ashleigh P	A.	Fayetteville Washington.
Bolinger, Walter Allen	A.	Lead Hill Boone.
Bollinger, Wallace H	A.	Charleston Franklin.
Brunson, Thomas Roselle	E.	Rock Creek Pike.
Bryant, William Cullen	A.	Nashville Howard.
Buckner, George L		DermottChicot.
Cabe, Robert Lewis		Burks Saline.
Campbell, Mary Lenore	A.	Fayetteville Washington.
Carter, Hugh R	E.	Fayetteville Washington.

Cartner, Edward ClintonS.	Fayetteville Washington.
Childs, James LA.	Warren Bradley.
Coker, Adam L E.	Lead Hul Boone.
Coker Roy E.	Lead Hill Boone.
Cole, Eva	Prairie Grove Washington.
Cook, IraE.	Fayetteville Washington.
Cooper, Pearl DyerA.	Antoine Pike.
Craig, Bessie,A.	De Queen Sevier.
Craig, Marion Stark	Jamestown .Independence
Crawford, William ReedE.	Fayetteville Washington.
Crozier, Ruth Margaret A.	Fayetteville Washington.
Dacus, IraS.	Alpha Yell.
Davis, Lyta S.	Fayetteville, . Washington.
Davis, W. RossA.	Lowell Benton.
Deane, Ruth FlizabethA.	Fayetteville Washington.
Dedman, Fred Albert E.	Fayetteville Washington.
Dickson, Alva Earl A.	BentonvilleBenton.
Dickson, Enos Howell	Desha Independence.
Dorn, Leonard ET.	GageOkla.
Dowell, Oliver KE.	Walnut Ridge Lawrence.
Droke, Albert HillE.	Fayetteville Washington.
Droke, Mary InezA.	Fayetteville Washington.
Dunn, Ralph KnoxA.	Fayetteville Washington.
Edwards, W. EdwardA.	El Paso Lonoke.
Elliott, Floyd E.	JonesboroCraighead.
Ellis, Oscar FergusonE.	Fayetteville Washington.
Feathers, John EdwardE.	Fayetteville Washington.
Feldt, LouiseT.	St. LouisMo.
Field, William TerryE.	Little Rock Pulaski.
Fine, George WT.	Rudy Crawford.
Flood, Clarence FrankE.	MemphisTenn.
Florence, Lucas CaseyE.	Golden CityLogan.
Ford, David Lane	CecilFranklin.
Fry, Joseph E	Cedarville Crawford.
Fry, Rayburn HenryA.	Atkins Pope.
Fulks, Webster Raleigh	Pauline Franklin.
Galloway, Samuel AS.	Fort Smith Sebastian.
Garrett, Forrest AgrippaA.	South McAlesterI. T.
Gatling, Richard JordanS.	BeardenOuachita.

Gentry, DickA.	Antoine Pike.
Gray, LillieA.	Hickory Valley .Indep'nce.
Greathouse, Ollie May A.	Johnson Washington.
Gregg, Alfred WelchA.	Fayetteville Washington.
Grundy, Edmund J S.	Mammoth Spring. Fulton.
Hamby, Randolph P E.	Prescott Nevada.
Harding, Vernon AlexanderA.	Fayetteville Washington.
Harrison, Ralph YA.	Fayetteville Washington.
Harvey, BenS.	Douglas Lincoln.
Henry, Alonzo FernandoS.	Lecont Pulaski.
Hicks, Everette BurnettS.	Searcy White.
Hollabaugh, Cleveland BE.	Marshall Searcy.
Holland, Robert Chester S.	Greenwood Sebastian.
Holthoff, Claude HS.	AveryLincoln.
Hughes, Leslie ClaireS.	Fayetteville Washington.
Hunter, Oscar Luther	BranchFranklin.
Hurst, J. H E.	ClarendonMonroe.
Jewell, HowardA.	ParisLogan.
Johnston, James HenryS.	Auvergne Jackson.
Jones, Benjamin FranklinT.	Durham Washington.
Jones, George Fleming	FrankPulaski.
Jones, Ralph RE.	Fayetteville Washington.
Jordan, Edna GarlingtonA.	Blakemore Lonoke.
Jordan, Emmett E.	LockesburgSevier.
Keener, Joseph LafayetteA.	Minnie Howard.
Kilgore, James Ollie E.	Fayetteville Washington.
Lowe, ClintonE.	VineyardLee.
Mahoney, Ferry OA.	El Dorado Union.
Martin, Reginald AE.	VanndaleCross.
McCartney, Jessie LouA.	Fayetteville Washington.
McDermott, Ben E.	DermottChicot.
Mercer, Charles Franklin E.	DermottChicot.
Meyers, Joseph ClevelandE.	HelenaPhillips.
Milner, Dufer JacksonE.	Milner Columbia.
Mitchell, Sibyl Audrey A.	Fayetteville Washington.
Mons, Leo ArthurE.	Little Rock, Pulaski.
Morgan, William SydneyA.	Chickalah Yell.
Morley, ArthurE.	Fayetteville Washington.
Munn, James Madison E.	PrescottNevada.

Neal, GenevaA.	Warren Bradley.
Neelly, Mary HelenA.	Fayetteville Washington.
Norman, OliviaA.	Fayetteville Washington.
Oliver, Margaret RachelA.	Fayetteville Washington.
Parsons, Harriet VA.	Fayetteville Washington.
Payne, Samuel S E.	Fayetteville Washington.
Pearson, John B	Poplar Grove Phillips.
Pope, Jake George E.	Taylor Columbia.
Pritchard, Virgil Felton E.	Springdale Washington.
Pruett, John Riley E.	Denning Franklin.
Pruett, Grover ClevelandE.	DenningFranklin.
Pye, GeorgeA.	Sweet Home Pulaski.
Ragland, Fannie Marie	Fayetteville Washington.
Read, Alicia JohnstonA.	Fayetteville Washington.
Reed, Kenneth AbramE.	Gregory Woodruff.
Revel John William E.	Augusta Woodruff.
Reynolds, Eddie AlmonA.	BranchFranklin.
Rhyne, James R E.	Ben LomondSevier.
Risser, Elizabeth InezA.	Fayetteville Washington.
Ross, Harvey J E.	Cane HillWashington.
	Cane Hill Washington.
Ross, JewellA.	Pine BluffJefferson.
Rowell, Fred ClevelandS.	Joella Lafayette.
Russell, George ClintonS.	
Rye, Gordan W	London
Salyer, CoraT.	
Sanders, Lucy EdnaA.	Fayetteville Washington.
Shinn, Erwin HenryA.	Russellville Pope.
Shore, Rena BuchananA.	Fayetteville Washington.
Smith, Andrew GrahamS.	Wesley Madison.
Smith, Charles EdgarA.	Marion Crittenden.
Smith, Elmer CliftonA.	Sidney Sharp.
Smith, Hamilton GE.	CamdenOuachita.
Smith, Jessie, A.	Fayetteville Washington.
Snead, Albert Lee	Fayetteville Washington.
Solomon, HenryE.	HelenaPhillips.
Stacy, HalT.	Vanndale Cross.
Stanley, Joseph HA.	Augusta Woodruff.
Stanley, Thomas EdwardS.	Augusta Woodruff.
Stockton, Ethel JuliaT.	Alston Franklin.

Stockton, Finis EwingS.	Cecil Franklin.
Swagerty, Alice Esther	Fayetteville Washington.
Tillman, Fred AllenA.	Fayetteville Washington.
Tillman, John WalkerA.	Fayetteville Washington.
Trigg, John WalkerS.	Texarkana Miller.
Trigg, Thomas EdwardsS.	Texarkana Miller.
Trumbo, Estella A.	Fayetteville Washington.
Tyson, William Claude E.	Buena Vista Ouachita.
Van Valkenburg, William ME.	WarrenBradley.
Veazey, Norman EverettE.	Dardanelle Yell.
Waddell, Elbert WA.	MonticelloDrew.
Waddell, William SewardE.	Tyler Texas.
Watts, James Samuel	Durham Washington.
White, Emmett LeeA.	Waterproof Lonoke.
Whitlow, Charles BirnieE.	Fayetteville Washington.
Whitmore, Willie LeoraA.	Fayetteville Washington.
Whittenburg, SallieS.	Elm Springs Washington.
Wilkinson, David Homer E.	Hartford Sebastian.
Wiliams, Hosea LA.	Fayetteville . Washington.
Williams, Joel MS.	WilksUnion.
Williams, Roy Welch S.	Fayetteville . Washington.
Wilson, J. MelvinS.	Evening Shade Sharp.
Wilson, J. ThadS.	Sheridan Grant.
Wilson, Nellie Dickson A.	Fayetteville . Washington.
Winborne, John Newton A.	Waterproof Lonoke.
Womack, William Vance	Centerton Benton.
First Year Cla	SS.
Abercrombie, EarlE.	PactolusBenton.
Abercrombie, Margaret ES.	BryantSaline.
Allen, Luther Hampton E.	Gravette Benton.
Alley, Elijah W A.	Mena Polk.
Alston, William CorderS.	Chappel Hill Sevier.
Askew, John HenryE.	CamdenOuachita.
Austell, TomE.	Wynne Cross.
Baker, EmmettE.	Fayetteville Washington.
Baker, Lacy Robert E.	Fayetteville Washington.
Ballard, Lydia S.	Durham Washington.
Barnes, Elbert LE.	Vandervoort Polk.

Barrett, Arthur James S.	JonesboroCraighead.
Barringer, Katherine LouiseA.	Fayetteville Washington.
Barron, Bertha LeeS.	Fayetteville Washington.
Barry, Lucile Leila A.	Fayetteville Washington.
Barry, Vera Belle S.	Fayetteville Washington.
Baum, Florence MS.	Fayetteville Washington.
Beach, William AE.	Grand LakeChicot.
Bell, James Walton E.	Fayetteville Washington.
Bennett, Elijah DeoA.	Buffalo Lick Poinsett.
Bethune, David Shaw E.	Portland Ashley.
Bishop, James Maloy E.	Fayetteville Washington.
Boardman, Clyde S S.	El Paso Faulkner.
Bowden, Edward BE.	Lewisville Lafayette.
Branch, James ArcherS.	Branch Franklin.
Brewer, Cortez Irving E.	MurfreesboroPike.
Brown, Elizabeth EllenA.	Fayetteville Washington.
Bryant, John Arthur E.	Fayetteville Washington.
Burris, William S T.	StuartIowa.
Burrows, Homer Tolbert	HealdtonI. T.
Cannon, RoyE.	Fayetteville Washington.
Cawood, TomE.	Maysville Benton.
Chandler, James Ewing E.	Fayetteville Washington.
Clark, Thomas EE.	GoshenWashington.
Cleveland, Bessie	Fayetteville Washington.
Collier, LesterE.	TupeloJackson.
Conway, GroverE.	MurfreesboroPike.
Cook, R. Wallace E.	Fayetteville Washington.
Cooper, Annie E	Fayetteville Washington.
Cooper, Archie Percival E.	Antoine
Coulter, David ButlerS.	White Cliffs Sevier.
Cox, MattieS.	Fayetteville Washington.
Crawford, EllS.	Sulphur City . Washington.
Cromwell, Robert ME.	Fort Smith Sebastian.
Crouch, Blanch LeeS.	Fayetteville Washington.
Crouch, LeslyeS.	Fayetteville Washington.
Dabney, James CarsonE.	Vicksburg Miss.
Dacus, ErmaS.	AlphaYell.
Dacus, Olie Estes S.	AlphaYell.
Darter, John Wilson E.	Black RockLawrence.

Davis, Arthur CA.	Fayetteville Washington.
Delozier, Cora A.	Elm Springs . Washington.
Eason, J. ThomasE.	Fayetteville Washington.
Ellis, JosephineS.	Fayetteville Washington.
Evins, Eula Kate S.	Fayetteville Washington.
Evins, Phebe S.	Fayetteville Washington.
Faulkner, Nathan Black S.	Cherry Valley Cross.
Finlay, David Mills E.	Hope Hempstead.
Frost, C. W E.	Habberton Washington.
Fraser, Leving RoscoeE.	Monette Craighead.
Gates, Lawrence E.	Fayetteville Washington.
Gean, HoustonS.	Darysaw Grant.
Gray, Albert A.	Hickory Valley Independ'ce
Grayson, Harry Cicero E.	Paragould Greene.
Grundy, Archie M E.	Fayetteville Washington.
Hall, Leroy PierceE.	Austin Lonoke.
Hardy, Dewitt H E.	Crawfordsville . Crittenden.
Harper, Walter C	Enola Faulkner.
Harris, Clara Elizabeth A.	Fayetteville Washington.
Harris, Julia Francis	Durham Washington.
Harvey, Frank PA.	Lake Village Chicot.
Hendrickson, Roy MartinS.	Martinville Faulkner.
Herron, Clarence E.	BentonvilleBenton.
Hervey, Afton E.	Morrilton Conway
Hewett, Pearl ForestE.	Fayetteville Washington.
Hight, William ClarenceE.	Fayetteville Washington.
Holbrook, Sanford Corey E.	BoonevilleLogan.
Holcomb, Joe L E.	Springdale Washington.
Hope, John MarvenS.	Hurricane Saline.
Horner, John SydneyE.	Lake Village Chicot.
Hudgins, Ella BlancheA.	Mena Polk.
Isom, John S.	Sedgwick Craighead.
James, Rex Esmerald E.	Graysville Benton.
Johnson, Estey Mary A.	Fayetteville Washington.
Johnson, Freeman LeeE.	Hatfield Polk.
Johnson, Lena	Delight Pike.
Johnson, PriscillaA.	Fayetteville Washington.
Jones, ClaudA.	Pauline Franklin.
Jones, Thomas JeffersonS.	De Queen Sevier.

Jordan, Flossie TurnerA.	BlakemoreLonoke.
Jordan, James KA.	BlakemoreLonoke.
Keith, William J E.	Malvern Hot Spring.
Kunz, Katie JanetteA.	Fayetteville Washington.
Lankford, Cora May S.	Fayetteville Washington.
Lankford, Millie AnnieS.	Fayetteville Washington.
Larrabee, Roy Ashley E.	Fayetteville Washington.
Lash, Charles Edwin E.	Little RockPulaski.
Lee, Theron Edward E.	Linwood Chicot.
Less, JakeE.	Walnut Ridge. Lawrence.
Less, MorrisE.	Walnut Ridge Lawrence.
Lester, AliceT.	Fayetteville Washington.
Leverett, BlancheA.	Fayetteville Washington.
Leverett, Charles DeaneA.	Fayetteville Washington.
Lewis, Charles H	Atkins Pope.
Little, MilfordS.	Summers Washington.
Long, Lexie W	Fayetteville Washington.
Manahan, Samuel C E.	Lenapah I. T.
Mann, Myrtle CT.	WinslowWashington.
Martin, HerbertS.	MartinvilleFaulkner
Martin, Herbert	Fayetteville
Masters, EffieS.	Durham Washington.
Mays, EdS.	Duff Searcy.
McBee, Victor E.	McBee's Landing . Marion.
McClellan, Stephen F E.	Claremore I. T.
McCloud, William Daniel E.	Staunton Washington.
McCoy, CarlosE.	Johnson Washington.
McCoy, MyrtleS.	Johnson Washington.
McKean, David Felix E.	De Queen Sevier.
McKinley, James M. CE.	Garfield Benton.
McMillan, Fred Lee E.	Mena
McWilliams, William FS.	El Dorado Union.
Meden, CarrieS.	Fayetteville Washington.
Miller, Myrtle Ellen	Fayetteville Washington.
Milum, Sella T.	Lead Hill Boone.
Mitchell, Addie T.	Fayetteville Washington,
Mitchell, OllieA.	Maysville Benton.
Moore, Mary Elsie	Fayetteville Washington.
Neal, William HarrisonE.	Cedarville Crawford.

Newton, Jasper CurtisE.	Portland Ashley.
Norman, Felix AugustusE.	Fayetteville Washington.
Oliver, John AA.	Clifty Madison.
Orrell, R. Jeff E.	Morrilton Conway
Parks, Clinton E.	Fayetteville Washington.
Peck, Jennie T	Fayetteville Washington.
Phillips, Myrtle LeeT.	Rogers Benton.
Plummer, James RobertE.	Huntsville Madison
Pond, Hugh JS.	Fayetteville Washington.
Portnell, J. Roy E.	Fayetteville Washington.
Read, Laura Elizabeth A.	Fayetteville Washington.
Reeves, John ArthurE.	El Dorado Union.
Rhyne, John T E.	Ben Lomond Sevier.
Ross, SamE.	Cane HillWashington.
Roulhac, Joseph P. GA.	Staunton Washington.
Russell, Samuel PenningtonE.	Joella Lafayette.
Rye, J. Cleveland A.	London Pope
Sanders, Albert ManningE.	Fayetteville Washington.
Sanders, Pearl MatildaS.	Fayetteville Washington.
Scott, John WalkerE.	Bradford Jackson
Sedwick, James E E.	Fayetteville Washington.
Shelton, William TheodoreS.	Webb City Franklin.
Sherrod, Willie VernonE.	GoshenWashington
Shultz, Harry Everest E.	Fayetteville Washington
Shultz, Howard LeeE.	Fayetteville Washington.
Simmons, James Felix E.	TupeloJackson.
Simpson, Donnie A.	Huntsville Madison.
Skirving, George WoodE.	HuntingtonSebastian
Slade, Carter GE.	McMurrain
Smith, Grover BrittonS.	Malvern Hot Spring
Spears, Bruce W A.	KeevilleMonroe
Stacy, CharleyS.	Cherry Valley Cross
Stanley, Edward MorrisE.	MariannaLee
Stewart, Lena PrairieA.	Horsehead Columbia.
Stone, Fannie RheaS.	FayettevilleWashington
Stubblefield, Etalee	Fayetteville Washington.
Stuckey, Henry DavidS.	BradenI. T.
Sturdivant, Robert W E.	McCroryWoodruff.
Summers, Charles C E.	Roseville Logan
Summers, Charles CE.	Roseville Logan

Sutton, EdithA.	Fayetteville Washington.
Taylor, Martin A.	Taylor Columbia.
Tharp, Mattie Irene	Fayetteville Washington.
Folley, John Hiram E.	Eureka Springs Carroll.
Trent, BessieA.	Fayetteville Washington.
Frent, MamieA.	Fayetteville Washington.
Prott, Hardin Henry E.	Vinita I. T.
Prussell, John Wesley	Price Hot Spring.
Tucker, George Reginald E.	Portland Ashley.
Utley, Robert LT.	Blaine Logan.
Vandiver, Garland ES.	HarrisburgPoinsett.
Wade, LilaA.	Fayetteville Washington.
Waltrip, Joe BirkS.	Gwynn Sebastian.
Watson, Edmond PennE	BentonvilleBenton.
Wieners, Fred Bernard A.	Fayetteville Washington
Wells, WilliamE.	Portland Ashley.
Whitaker, Calvin E.	Stilwell I. T.
Whitaker, Jessie	Stilwell I. T.
White, PearlS.	Fayetteville Washington.
Whitehead, Nellie	Fayetteville Washington.
Wilkinson, Henry LeeS.	Hartford Sebastian.
Williams, Walter QuincyE.	Fayetteville Washington.
Willis, John Edmond S.	Mena Polk.
Wilson, Frank E.	Fayetteville Washington.
Wilson, Henry J E.	WarrenBradley.
Wilson, William Albert A.	WarrenBradley.
Winn, Virgil EmeryA.	Eufaula I. T.
Wood, John Proudfit E.	Fayetteville Washington.
Woods, John RudolphA.	ClarksvilleJohnson.
Yarbrough, Charles S E.	Elliott Ouachita.

## Students of Harmony and History of Music.

Keeney, Gussie.

Taylor, Lena.

#### Students in Piano.

Blevins, Annie B.
Bolinger, May.
Cooper, Pearl.
Douglass, Ella.
Droke, Leila.
Gregg, Edna.
Harris, Clara.
Hutcherson, Lillian.
Johnson, Lena.
Keeney, Gussie.

Leverett, Nina.
Mackey, Lura.
Miller, Myrtle.
Mitchell, Sibyl.
Moore, Elsie.
Smith, C. E.
Stone, Allie.
Taylor, Lena.
Williams, Donna.

#### Students in Violin.

Hamilton, Eileen.

Moore, J. F.

#### Students in Mandolin.

Bourland, James.

Moore, Henrietta.

### Students in Guitar.

Maguire, Eva. McMillan, Fred. Pearson, John.

## Students in Vocal Music.

Cox, Mattie.
Evins, Phebe.
Garrett, F.
Gray, C.
Mitchell, B.
Moore, Elsie.
Morrow, L.
Neal, Geheva.

Robinson, Myrtle. Smith, C. E. Solomon, H. Stone, Rhea. Swearingen, S. C. Williams, Beulah. Wilson, J. R.

## Students in Expression.

Blair, L.,
Barton, M.
Bates, M.
Cox, M.
Cole, M.
Delozier, Cora.
Gray, L.
Mackey, L

Ross, J.

Stockton, E.
Smith, E.
Solomon, H.
Stone, E.
Stacy, E.
Williams, B.
Whitehead, N.
King, V.
Salyer, Cora.

### Students in Oratory.

Bennett, C. E. Brockman, E. W. Bryant, W. C. Brewster, H. Cotton, M. L. Carter, E. L. Cheatham, W. R. Edwards, W. E. Fergus, F. H. Garrett, F. A. Gray, J. G. Gray, Clifton. Henry, A. F. Howard, A. S. Holthoff, C. H. Hurst, A. G. Harris, W. M. Ingersoll, W. H. Jones, G. F. Johnson, J. H. Keenan, T. N.

Legate, C. Legate, R. McVey, Geo. Mackey, E. Mitchell, B. Nordmeyer, C. D Oliver, J. A. Oates, C. E. Pope, A. D. Peterson, W. J. Pollard, W. A. Reaves, C. M. Sadler, D. K. Stanford, Jas. Swearingen, S. C. Tolley, H. White, E. L. Wilson, J. R. Wilson, W. O. Winn, V. E. Winburne, J. N.

## Students of Physical Culture.

Abercrombie, Bertha.
Barry, Lucile.
Blevins, Annie M.
Barron, Bertha.
Baum, Florence.
Crozier, Ruth.
Craig, Bessie.
Cleveland, Bessie.
Droke, Mary.
Gray, Lelia.
Gallaway, Margaret.
Harris, Loma.
Harris, Clara.

Jordan, Grace,

Johnson, Estev.

King, Vera.
Mitchell, Sibvl.
Meden, Carrie.
Mackey, Lura.
Moore, Elsie.
Oliver, Rachel.
Peck, Dora.
Risser, Elizabeth.
Ross, Jewell,
Smith, Jessie.
Simpson, Donnie.
Shore, Rena.
Stone, Ray.
Stone, Ethel.
Whitmore, Willie.

#### Students of Art.

Bunch, Burton.
Barry, Lucile.
Blair, Leora.
Blair, Leila.
Blevins, Annie.
Cleveland, Bess.
Carothers, Stewart.
Clark, Lula.
Clark, Flora.
Cole, Marv.
Deane, Ruth.
Chitwood, Zena,
Cochrane, Leroy.
Gregg, Annie.
Gregg, Mildred.

Hill, Lola.
McCartney, Stella
McIlroy, Cornelia.
Nelson, R. J.
Oates, C. E.
Peterson, W. J.
Phillips, Myrtle.
Stone, Ethel.
Shore, Rena.
Streepy, Paul.
Stone, Hicks.
Kolb, \*Sallie.
Sutton, Edith.
Vandeventer, Geraldine,

## SUMMARY OF STUDENTS.

## Collegiate Department.

F	raduates	2	
ŠE	eniors	28	
ī	niors	29	
30	phomores	39	
h	reshmen	90	
Sł	nort Course in Engineering.	12	
SI	pecials	44	
			244
	Preparatory Department.		~11
y	agend Wage Class	170	
	econd Year Class		
, 1	rst Year Class.	197	
			367
	Total in College and Preparatory Department		611
št	rudents of Instrumental Music	42	
št	udents of Vocal Music	22	
St	tudents of Elocution, Oratory and Physical Culture	90	
St	rudents of Art	29	
	Total	183	
N	ames counted twice	165	
			18
	Total Number of Students in the Departments at		_
	Fayetteville		629
M	Tedical Department (Little Rock)		236
			39
	ranch Normal (Pine Bluff)		180
		-	1084
L	aw Department (Little Rock)		38
	Grand Total		1084

#### ALUMNI ASSOCIATION.

The object of this association is to maintain the interest of the graduates in the institution and bring them into a closer relation with the University. To this end all graduates are regarded as members. The association holds annually a meeting and a banquet at some time during Commencement week. The officers are as follows:

J. F. Moore, 1893, President.
Miss Jobelle Holcomb, 1898, Secretary.
Miss Naomi J. Williams, 1880, Treasurer.

#### List of Alumni.

A George Carl Abernathy, B. A., 1900, Law Student, University of Pennsylvania.

Don C. B. Aiken, C. E., 1889, Civil Engineer.

Rathburn Alden, B. A., 1902, Assistant Cashier, Grove Bank Grove, I. T.

Edna Allen, B. A., 1896, Teacher, Muscogee, I. T.

L. S. Anderson, B. L. L., 1884, Clerk in Land Office, Washington, D. C.

J. D. Arbuckle, B. A., 1892, County Clerk, Paris, Ark.

C. F. Armistead, B. A., 1893, Captain in U. S. Army.

L. R. Ash, B. C. E., 1893, Draftsman, Waddell & Hedrick Kansas City, Mo.

George H. Askew, B. A., 1898, Insurance Agent, Fayetteville Ark.

Nancy E. Askew, B. A., 1901, Mrs. C. N. Weems, Little Rock

W. H. Askew, B. A., 1897, Lawyer, Magnolia, Ark.

W. E. Ayers, B. C. E., 1898, Osceola, Ark.

Nettie Barnett, B. L., 1876, Mrs. C. P. Boles, Fayetteville, Ark. Ida Barr, B. S., 1896, Mrs. R. E. Bagby, Cameron, Mo.

R. B. Barton, B. Ph., 1902, Deputy County Clerk, Marion, Ark.

C. O. Bates, B. A., 1883, Professor of Chemistry, Coe College, Cedar Rapids, Iowa.

J. H. Bates, B. A., 1886, Lawyer, Corsicana, Texas.

J. W. Baxter, B. A., B. S., 1902, Principal North School, Fayetteille, Ark.

J. D. Beakley, B. Ph., 1902, England, Ark.

Mary Beattie, B. A., 1896, Teacher, Deaf Mute School, Flint, Michigan.

J. C. Bell, B. A., 1894, Physician, Frazier, Tenn.

M. L. Bell, B. A., 1898, Lawyer, Pine Bluff, Ark.

A. W. Bevers, B. A., 1898, Principal Public School, Springdale, Ark.

Blanche Bibb, B. A., 1893, Mrs. G. A. Humphreys, New York.

J. W. Black, B. A., 1892, Lawyer, McAlester, I. T.

W. I. Blackwell, B. C. E., 1892, Engineer, Golden Lake, Ark.

J. H. Blair, B. C. E., 1899, Assistant Engineer, Metropolitan street Railway Co., Kansas City, Mo.

Nora Blakely, B. A., 1878, Mrs. H. M. Hudgins, Fayetteville, Ark.

\*W. P. Booth, B. A., 1882.

Alice Borden, 1877.

J. A. Bostick, B. S., 1901, Medical Student, Little Rock, Ark. Laura D. Botefuhr, 1875, Mrs. G. W. Schulte.

Preston Bowles, B. C. E., 1888, Civil Engineer, Tishomingo, I. T.

W. E. Boyd, B. A., 1896, Lawyer, Cooper, Texas.

Amanda Braly, B. S., 1896, Washington, D. C.

Etta Braly, B. S., 1896, Mrs. Thomas McColloch, Cane Hill, Ark.

E. H. Braly, B. A., 1894, with O. & C. C. Ry. Construction Department, Fayetteville, Ark.

<sup>\*</sup>Deceased.

- E. K. Braly, B. M. E., 1897, World's Fair Offices, St. Louis, Mo.
- O. P. Brewer, B. S., 1893, Webber's Falls, I. T.
- O. D. Briggs, B. A. and B. Ph., 1902, Garner, Ark.
- A. M. Brixey, B. A., 1890, Hardware Dealer, Mounds, I. T.
- Edgar Thurman Brown, C. E., 1900, Assistant Engineer B. & O. R. R., Pittsburg, Pa.
- F. I. Brown, B. M. E., 1902, Student, Cornell University, Ithaca, N. Y.
  - H. S. Brown, M. E., 1901, Mechanical Engineer, Brooklyn, N. Y.
    - W. D. Brown, B. A., 1882, Physician, Newtonia, Mo.
- H. E. Buchanan, B. A., 1902, Graduate Student, University of Chicago.
  - H. M. Butler, B. A., 1879.
- J. L. Campbell, B. A., 1897, Traveling Salesman, Greenwood, Ark.
  - \*E. B. Carden, B. L., 1877.
  - \*Ella Carnall, A. M., 1881.
  - A. H. Carrigan, B. A., 1882, Lawyer, Wichita Falls, Tex.
  - Ann E. Carson, 1875, Mrs. John Knight, Jonesboro, Ark.
  - Augusta O. Carson, 1875, Mrs. T. W. Cline, Downey, Cal.
- C. K. Chanslor, B. A., 1882, Cashier, Farmers' & Merchants' Bank, Cassville, Mo.
  - W. R. Cherry, B. A., 1882.
  - W. Clancy, Jr., B. C. E., 1902, Mining Engineer, Butte, Montana.
- V. H. Cochrane, B. C. E., 1901, Draftsman, Waddell & Hedrick, Kansas City, Mo.
- /J. T. Collier, B. A., 1901, Principal of Schools, Charleston, Ark.
  - Sydney Connelly, B. A., 1900, Farmer, Poplar Grove, Ark.
  - Jessie Cravens, B. L. L., 1883, Mrs. O. Cravens, Neosha, Mo.
- W. A. Crawford, B. A., 1901, Principal of Schools, Arkadelphia, Ark.
- A. B. Crozier, B. E. E., 1897, Electrical Engineer, S. & S. Packing Co., New York.

<sup>\*</sup>Deceased.

Wm. N. Crozier, B. A., 1888, Clergyman, Conway, Mo.

R. N. Cummings, B. A., 1898, Medical Student, Denver, Col.

Lula Curry, B. S., 1892, Mrs. G. L. Teller, Chicago, Ill.

Mike Danaher, B. A., 1888, Lawyer, Pine Bluff, Ark.

Hadgie B. Davies, B. A., 1893, Adjunct Professor of English and Modern Languages, University of Arkansas.

Lila Davies, B. A., 1896, Mrs. Claude Head, Texarkana, Ark.

J. H. Davis, B. E. E., 1901, Electrical Engineer, Altoona, Pa.

B. F. Davis, B. A. and B. S., 1901, Benton County, Ark.

Lizzie P. Davis, 1875, Mrs. R. C. Brown, Florence, Ariz.

Ruth Anna Dickinson, B. A., 1900, Mrs. Elliott Berry, Bentonville, Ark.

Thomas Tiller Dickinson, B. A., 1900, Law Student, Little Rock, Ark.

W. E. Dixon, B. A., 1888, Teacher, Waldo, Ark.

C. H. Drake, B. C. E., 1891, and C. E., 1894, Engineer, Helena, Ark.

N. F. Drake, B. C. E., Professor of Geology and Mining, Imperial University, Tien-tsin, China.

C. J. Drees, B. E. E., 1896, Member of Arkansas Electric Manufacturing Co., Little Rock, Ark.

G. W. Droke, A. M., 1880, Professor of Mathematics, University of Arkansas.

W. H. Duncan, B. L. L., 1884, Lawyer, Conway, Ark,

Mallie Dyer, B. A., 1894, Professor of English and German, Florida State College, Tallahassee, Fla.

Clara Earle, B. A., 1896, Professor of English, Cumberland University, Lebanon, Tenn.

\*W. L. Edmiston, B. L. L., 1884.

Amanda A. Eld, B. A., 1898, Teacher, Tuskahoma, I. T.

C. J. Eld, B. C. E., 1896, Electrical Engineer American Water Works & Guaranty Co., St. Joseph, Mo.

George W. Eld, B. M. E., 1900, Engineer, with Armour Packing Co., St. Joseph. Mo.

<sup>\*</sup>Deceased.

F. W. Ellis, B. A., 1881, Lieutenant U. S.  $\Lambda rmy,$  Fayetteville, Ark.

W. Y. Ellis, B. E. E., 1902, Electrical Engineer, Eufala, I. T.

W. W. England, B. A., 1883.

A T. Erwin, B. S., 1901, Assistant Professor in Horticulture. State Agricultural College, Ames, Ia.

\*C. R. Fillmore, B. S., 1899.

L. F. Fishback, B. S., 1889, Lawyer, Alvin, Tex.

J. C. Floyd, B. A., 1879, Lawyer, Yellville, Ark,

W. M. Flynn, B. A., 1888, Teacher, Kennedale, Texas.

W. A. Freeman, B. A. and B. S., 1901, Teacher in Philippine Islands.

/Rowena M. Gallaway, B. A., 1902, Teacher, Presbyterian College, Milford, Tex.

J. R. Gannaway, B. A., 1890, Lawyer, Member of Legislature, Warren, Ark.

D. A. Gates, B. A., 1884, County Judge Desha County, Arkansas City, Ark.

F. I. Gibson, B. S., 1902, Chemist, Ferro-Steel Co., Cleveland, Ohio.

J. E. Gibson, B. M. E., 1894, Engineer American Pipe & Manufacturing Co., Philadelphia, Pa.

W. P. Goodwin, B. L. L., 1884, Lawyer, Warren, Ark.

Belle L. Gordon, B. A., 1876, Librarian, Chicago. Ill.

W. D. Gray, B. A., 1900, Student, Cornell University, Ithaca, N. Y.

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  - B. J. Tillar, B. A., 1886, Capitalist, Fort Worth, Texas.
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  - S. C. Treadwell, B. A., 1894, Lawyer, Tishomingo, I. T.
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Daisy Young, B. A., 1900, Springdale, Ark.

\*Deceased.

Note.—The President will be pleased to receive information as to the address and occupation of those alumni for whom these data are wanting. The alumni are especially requested to give notice of any emission or errors in the foregoing list, or any changes made during the ensuing year.

66 gradualls in Agents

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